FIGURE 1

```
1     ggatccagaa taaccaaaac aatattgaaa aataaagaac agcgttggtg gattaacatt
61    ttccaatttc aaaacttact atagcactgc ggtaatcaag cagtgtggca ctgtatagca
121   tgtacattac agatcagtgg actagaatca atgtccagaa ataaaccgtt atgtttataa
181   tgaattactt tttaataagg tgtcaagaca acgcaatggg aaaagaataa tgaattcaac
241   aaatgatgca tggacaaccg gacatgcaca tgcaacacaa tgaatttgaa ttcttctatc
301   gctccatgca taaaaactaa ctcaaaatgg gtcacggatg taaatgaaaa gctaaaacta
361   taataatcct agaggaaaac ctaggagtaa atctttaaga tgttattgta ggcagtggtt
421   tctcagatag gaccccaaaa tcacaagcga caaaaagaaa ttggacttaa agttaaatac
481   ttttgtgctt caaacatcat caagaaagtg aaaacacaac ccgcagaagc aataaaaatg
541   tctgtaagtc atgtatccga ttagagactt ctatccagga tatataaata atgcaattca
601   atgataaaaa agataaatag cccagttttc caaagagtca agcatctgaa tatacatctc
661   tccaaaaata tacagatatc caacaagcat gtgaaaagat gttcaaagcc atttgccagg
721   tgcacaaacc caagacagta tgaggagatg ctacagggac tctgctgctt cacagacatg
781   aagcgttggt gagaatgtag gcagccgcct ttggggactt cacatccccg ccgccccacg
841   cacggtgagc tagtgtttaa acttagccga gatcaataca cgcgactgtg tgcccgtcag
901   accctgcgct gccggcgggg ctgggagagg cgggcgccag gagtgggcgg gaacctgggg
961   gtcaggcccc agccgcggga agcgcgccca ggagcgcgcg aaaccttctc cacacccttc
1021  caggcatttg cccgccgcga ttcagagagc cgacccgtga cccctggcct cccctagaca
1081  gccccgcatg tccagatgtg ccgtcccgcc tgcctcccgc gaccactggc catctctggg
1141  cctgggcgcg gttctcggcg cccggcctgc ccccgccagg agccgcaggt ccagccagtg
1201  aagaagcccg cgcctgaagg agcctctgtg ctccagaatc catcctcagt atcagcgctg
1261  gggtggcctc ctccaggaag cccttctgat tctctcatgg gtcgctcttc ctctgcagac
1321  tcccggagca cccccctgctc caagtaccgc aagtggcact gagaacttgg ggagagcaga
1381  ggctgtgcct agatttgtag ggagtccccg cagctccacc ccagggccta caggagcctg
1441  gccttgggcg aagccgaggc aggcaggcag ggcaaagggt ggaagcaatt caggagagaa
1501  cgagtgaacg aatggatgag gggtggcagc cgaggttgcc ccagtcccct ggctgcagga
1561  acagacacct cgctgaggag agacccagga gcgaggcccc tgccccgccc gaggcgaggt
1621  cccgcccagt cggcgccgcg cgtgaagagt gggagagaag tactgcgggg gcgggggcgg
1681  gggcggggggc ggggcggggg gcagccggga gcctggagcc agaccggggc ggggccggga
1741  ccggggccag ggaccagtgg tgggaggagg ctgcggcgct agatgcggac acctggaccg
1801  ccgcgccgag gctcccggcg ctcgctgctc ccgcggcccg cgccatgccc tcctacacgg
1861  tcaccgtggc cactggcagc cagtggttcg ccggcactga cgactacatc tacctcagcc
1921  tcgtgggctc ggcgggctgc agcgagaagc acctgctgga caagcccttc tacaacgact
1981  tcgagcgtgg cgcggtgagc gcgggcgggg cacgggtgga gcgcgggctg aggtgcgtcc
2041  gggacccggt ttggacggca gaggcctggg cggggcgcc gagggcccgt cggggcggcc
2101  cggacaggac tgggggtgtc caggaccctg tcagggaggg cagaactgcg gtggggcgtg
2161  ccctgggctc ccagtggccg gtgggtacc
```

FIGURE 2

```
   1    ttgcacgctn ctcagccccg gctgtactat tggtctacac gtgccatcgt ggtttgctgc
  61    acccatcaac ccatcatcta cattaggtat ttctcctaat gctctctttc cccttgcccc
 121    ccaccctcta acacgccctg ttgtgtgatg ttgacctccc tgtgtacatg tgttgtcatt
 181    gtacaactcc tgcttatgag tgacaacatc tgtctgattt tctgtcttgt gttagtttgc
 241    tgagaatgat ggttcccatc ttcatccttg tacctgcaaa ggacatgaac tcatccttta
 301    atatggctgc ttagaatccc acagtataga tgtgcctcat tttctttatc cagactatca
 361    ttgatgggca tttgggttgg atccaagact ttgctattgt gaacagtgat tcaataaaca
 421    tacgagtgca tgtgtcttta tggatgaatg attgataatc ctttgggcat atacccacta
 481    atgggattgc tggacctaat ggtttgcctg gatcctgatc cttgaggaat caccacactc
 541    tcttacagtg taaaagtgtc tctatatata ctcatcccct ccagcatctg ttatttactg
 601    actctttaat catcaacctt cttactggag agagaaggtt taattaccac taatgacgag
 661    cctttaatca aattgttgtt ggacccttcc caacttactt gcgaaggggt catttgtaaa
 721    cttacgccac cttttgatgg ggcagttttt ctcgtttatc cgcaaagatc ctgggggacc
 781    ccttttttta actcttttga agaccgttat atctgaacaa tttctcccat accgagaggt
 841    ggcgggttac aacccttgaa agtttctttt tttttttggg gcccccttagt ttcacaaaaa
 901    tcccttcgga ccaatttgcc ttttgttgcc aaggaatttt tcccccctaag tcactaggaa
 961    tttttcccag ggcacacagg tgtagtggcc ttccccagaa ttttttctcct gggtatccaa
1021    tgttataaga aaaaaaattg gggaattttt ttaaacctcc aataaaattt tttatagaga
1081    taaggccggt ttcatttnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
1141    nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnncgc
1201    ggtcttcagc ccgtggtgaa gactgattaa cagtcataag aaggtaaagc tctaagtgac
1261    ctgtaagaaa catacagtct cacacaatta ggcaaggagt ccaacttgga agaaagagtg
1321    gcatagattc aaaccctgat gccacaactt atgttaaccc tcctgaggct caacttctca
1381    cacatgacag gagaatctca tcatgtacct caattaattg atatacagat tatggtaaac
1441    attcaatgaa aaagtatgta aagtttctat cattctacta cagttggtat tcaacaaatg
1501    ccactttatt cactttctgt taagcctgaa agaagtactg aatgacatca acgagtgcaa
1561    ttcaacaaat ataatttgag cactgattac tcaataagca ttatgaggaa ctaaatatt
1621    atcagcaaat gatggctgac atagaggaaa tgtgacagag taggaagatc cctgtactcc
1681    ctgtatcaaa ggactgagat tcttccactc aggaccatgt gtgaccccaa cagaaagtag
1741    aaatttacag aaagatacct ggcaaaacac ccaaatagtt tgaagttaaa aaatatacct
1801    ctgaataaca ccccatggaa atttttaaag attataatgt gaattaaaat gaaaacatat
1861    aaccataaca aaaattgtag gatacaggaa aactggtgct catatagcat taactgttta
1921    cattacattt tagagaatca acttaattca attatctaag tttctatttt agaaaactat
1981    gtaaaaaaag gagagcatat ttaaaaagta agcagaagaa caaaagataa gcatgacaga
2041    caatgaaatt gaaaatggaa aaatcataga gaagaatcaa atgaatcaaa agtagtttct
2101    tggaaaagat caataaataa aattggttga tataatttac tgatattagg agtgggaaag
2161    ataatcactg atcatagatc catgatgaac aagcttattt caataaatta ataaactcag
2221    caacttcaac aaaatggaca gattacttgg aagacaccaa ttaccaaagc tcaaaaaaag
2281    agaatctaaa tagtcctata tttatgaaaa aaaaaaacaa aactgaattt gtatttaaaa
2341    actttgccac aaagaaaatt ttaggttcag atgggtttcc taataaattt ttcccatttta
2401    gtaagaataa tatcaattct acacaaactc attcaaaaaa aaaggagaga gaatacttta
2461    caacacgttc tgcaaggtca gtattaccct gataccaaaa caaaggatat tacataaaaa
2521    cgacaccaat atccttcatg aacatagatt cttcaccacg gggctggaag gatccgnnnn
2581    nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
2641    nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnatag cacgcccttg agccctggt
2701    gaatataaga gattaggcta cagcgtgttc tactccaact ttatttgctt tctgagcatc
2761    taattccact ttgcaaaatg gacatttttt ttccctcttg agagtcagga aattaccagg
2821    tgtgccagga taatccttag tatcaactgt aaaatatcag tataaaataa tgagtaagca
2881    tatttcagtg ggtgtttata tgcttttggt tgcatagcat gagccaaagg cagataaaaa
2941    atgtgggctc cagatagtga ctcaatctcc agaaatcata atgtcagtta cacaatgata
3001    tttctatatt ggcatcacaa aataatccac ttgtcatagg ataattgctc tagatgaggg
3061    catggagctg tgctgaggaa tctgccattt ttctttatcc agactctgtc tcataccgac
3121    cacaggcccc aatcattgtc tatcaaaaaa catgcttgtg tctcttttgg cttactatga
3181    aaggaagcaa gatctttttcc tcaagcattt aagtgttgac tgtgggctac ccagtgtgct
3241    agacactgng gatcaaattc tgtgaggtta aaaataccccc ataactcact ggatagaaat
```

FIGURE 2 (cont.'d)

```
3301  tcaaaatgct cgctatgttg attctatgat caacttccaa ggggaccttt ntacctccta
3361  tcttcatcag caagcaacta cattgatttt gtagcccagg atctattccc acgtcaaccg
3421  tgggtttcaa atgtttgctc tagctcaatg gcctcttaag ccactaaccc aatatgttgc
3481  tttttaccag taaaaaagtg catctgggga ataagttggt gtatatttgt ggttcagcca
3541  gcccatagat cgtccagagg accccaggct taggaggaat cctcagattt gagagccact
3601  gtcctgtatg atgcagatag cacagctctt cctgaaaata ggaattcaaa tgaggaaaaa
3661  tgaaaactct cctaattatt ttcttctgcc tctttcattc caagctcatc taattatcat
3721  gctctattgt gaagaatcaa agaaagaact cataaatata ccttttgtgc ctgtattttg
3781  aatgtacgtt gtgcatgtaa gcctttgtgg ttaagcaaat gtcaagaaaa tccctagtcc
3841  cattgcttac agtcaatatg gggcaattca agcaaagtat atgcctctaa tatggtttga
3901  aaattctgaa agttcagaaa aaatgttgct acttcagcca tctgatgtta ctggatattg
3961  agaatgagac ctcctctccc tctgctttcc tcatttccat ctcctccttc ctctttctcc
4021  tctctccctc tcctttattc tccttctccc tcctctctct ccatgcttac tcccttcctc
4081  ttctccctct ttcttctttа ttctccttct ccctcctctc tctctctccc cttttttcctc
4141  ccttcctctc ctccctccct ctcctttatt ctccttctcc ctcctctctc tctctccccc
4201  ttttcctata ttcccagatt aggccatttt caaaactggt taaacattcc ccaaaagcat
4261  ttatgacaga gaattgacta ggatctcacc tgaatcacag agcttgccca ttgaacacag
4321  gcaaagatca agccattttc tcttgatgtg atgcttcagc attttatgca tttgaaacaa
4381  attttatgta aaaaaaagct tagccctttg gtgacgggga ttccttttct ggatgatctg
4441  ccaaagaatc aagacccaac gtccagctta tcaaattttc tctggacctt tannnnnnnn
4501  nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
4561  nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnccgtggtg aagacttcca cgtgaacttt
4621  aaagtagttt tttccaattc tgtgaagaat gtcattggta gcttgatggg gatggcactg
4681  aagattttct tcatttttat gactgcatag cattccatgg agtatatgta ccacattttc
4741  tttatccaat tcactgttgg tgggcaccta ggtcaattcc atgactttgc tgttgtgaat
4801  agtactgcaa tgaacatgtg agtgcatgtg tcttttttgga ggaataattt gttctctttt
4861  ggatatatac ccagtaatgg ggttgctggg ccaaatggta gttctgtttt aagttctttg
4921  agaaatctcc aaactgcttt ccacagaggc tgaactaatt gacattccca ctgccatgca
4981  tgagcattcc cttttctcct cagctccacc aacatctgtt gctttctgac tttttgataa
5041  tagccattct gatgtgtgag atggtagccc attggggttt cttttttttt ttttaagaca
5101  gagtctcact ctgtcaccta ggctgtggca caatgttggc tcgctgcaac ctctgcctcc
5161  tgggttcaag tgattctcct acctcagcct actgagaagc tagggttaca ggcacctgcc
5221  accacaccca gctaattttg gtattttttg tagagacagg gtttgccat attggcaagg
5281  ctggtctcta actcctgacc tcaggtgacc cacctgcctc ggcttcccaa agtgctggga
5341  ttgcatgcgt tagctaccat gggtggtttt tgacttgcat ttctctgatg attagtaatg
5401  atgatccttt tttcatacat ttgttggcca cttgtatgtc ttcttttgag aagtgtctgt
5461  tcatatcttt tgcccatttt tcaatggggt tgttttttcc ttgtccagtt gtttaagtta
5521  tttatagatt ctggatatta gtcctttgtt gggtgcataa tttgcaaata ttttatctca
5581  ttctgtaggt tatctatttа atctgttgat agtgtctttt cttgtacaga agttgttcag
5641  tttaattagg tctcacttgt caatttctgt ttttgttgta attgcttttg aggacttaat
5701  cataaattct ttcccaaggc ccatgtccag aatggtgttt ctgagatttt cttctaggat
5761  tcttttactt caaggtctta tatttaaatc tttaatccat ctggagttaa tttttgtatg
5821  tggcaaaagt taggtgtctt gttttatttt tctgcatatg gctagtcagc tatcccagga
5881  ccattcattc actagggagt cctttcccca ttgtttactt ttggcaactt tgtcaaagat
5941  tagatggctg taagtgtgca gatttatttc tcagctctct attctgttca actggtgtag
6001  gtatctgttt tcgtactagc accatgctgt tttggttact gtagtcttat tagtatagtt
6061  tgaagccagg taatgtgatg cctctggctt tgttcttttt gcttaggatt gcttttttggg
6121  ctctctgttg ttgttgttcc atatgaattt taggacactt ttttccaatt ctataaaaaa
6181  atgacattgg tagtttggta ataatagcat tgaatctgta gatagattgc tttgggcagt
6241  atggccattt taatgatatt gattcttcca atccctgagc atggaatgtt tttccattta
6301  tttgtgtcct ctctgatttc ttttagcagc gttttatagt tctccttgta gagatctttc
6361  acctccttgg ttagctgttt tcctaggtat tttaattttt tgggcctttg taagtgggat
6421  tgcaagcttg aattggttct tagcctgaat gttattggtt tatagaaata ctactaattt
6481  ttgccatcca ttttgtatcc tgaaacgtcc ctgagtcatt gttaattcc cagaggcttt
6541  gtggagtctt taggtttttct atttttagaa tctattcttc ccaaagagaa atactttccc
```

FIGURE 2 (cont.'d)

```
6601   ctctcttttc ctaatcggac cccctttattt attcctttgc ccaaggcttg gaaagccctt
6661   ccatactttt ttaaaaagaa cgtggaaaaa ggcccctttc ttattctcgt ttaaaggaac
6721   cttccatttt cgctgtcaaa tggnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
6781   nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
6841   nnntttgttg ggaatatccg gtgcttattc ctcttcagga gttttattct tccaaaaatg
6901   cagcttttca ttcctcctcg ttttctcttc tgtgccaaat gcctccagcc tttccatgtt
6961   ggtgcggtaa gctagacatt tttagtttgt agtgattgtt ttcgtttgtg tttgtatgtt
7021   tttgtgccca tagtcacttc tgtaatgttc gtttctgagt ttcctttggg gggattaacc
7081   tgccactgaa gtgtcagctt ccctgtcatg ggactgtcct tggaatgaca ggttttcctt
7141   ccaccatagg atctgccact gtgaaggaga tgatgagagc cccctgatca cccctgcca
7201   ctgcacagga agcctccact tcgtgcacca ggcctgcctg cagcagtgga tcaagagctc
7261   cgacacgcgc tgctgcgagc tctgcaagta tgagttcatc atggagacca agctgaagcc
7321   actgagaaaa gtacgtggga ggaagggatg cttcaccctt cctgaaacca gtgaccccca
7381   gaaagctggt gtctcagatc atgaggtcat ggcttgcctg cgttcatttc cttaaaaagc
7441   tggggctggt gcttacattt gcattgtaga gattgttgtt tctggtgctg attttcaagt
7501   ccctcttctc aggaagaagc tctttctgac cattcataat ccttcttttc ccttcaaagt
7561   aagactgctt gcttgtcggt gtcagtcctc tggcctttga ctacagactg tttgtgacat
7621   atcttagcac ctaattttat acatattaac tgttgacgtc ctgcttctct gattaggact
7681   gtctgttgga gattagtatc tccccagcac ccagcacagt gtagcataca gtaaatttat
7741   ttgtatacac ccatgataac tatttgctgg atgggagtgt gagtaggtgg ataggaaaa
7801   gaaaggaagc acaaacgttg cgtgatgtgc aactgtcttc agaaaggacc cacaggcatt
7861   gcatgacacg cagctgtctg gaggcccatg tcactgctcc ctctgagagg agctttgtcc
7921   gccacactgg cttcctgttt aaattttgac tgtttcatat atctctctag atgcccagca
7981   caaaaggttt tgtctggaag aataaaaaac tgttcctatc tcagaacatt aatatataaa
8041   ttgcaagata agtcacataa tcaaatacta gccaattaaa tgctaaatgg tgtgctggta
8101   gagcataaca gtcattcaga aaaggaaatg ctcattatga gctagagtgc tggggaagtg
8161   gagcgatggt agcctcatag ggtgtttggg ttttagagca gttcttgaag gatcactagg
8221   atttggaggc agagtgcaag gagtttagag aggtcaggct gtctgtggag taaagcatac
8281   cctagaaagg tgaaggtgaa cattgacagg gtgtcaagct acgtgcgttg taggaagtag
8341   cagggagcat ggggcactga ggcactgact ctgtattata ggtaggaaga ccagggaact
8401   tgctagtgta taaaatccca gcagaaaaca accagattta gagaaggctt gtgcaaactg
8461   cttaaaaaaa tgttttgccc agtagaaacc ttgtaatta ttgggtgcct actctatgct
8521   aatctctcaa catgggaagt ccttgaggct ctatttcaa ctaccctgca tagactcatc
8581   tggaaagagg ctgtgactag ggttggcaaa ggatatgtgc agagtgttta cacattgttc
8641   tttctctcta cctttatgtg ttttctcctg attcggaaac cagtaaatga aaaagaaagt
8701   ctggctattt ggagtaaatt aatgagctcc tagaggagat gggactagca gagtctgctt
8761   gtaccaggaa ctcttagcgt cgatttcgag ctgttgctgc caaagtagca aggaccaaag
8821   agtgagcgtc ttctgccatt caccttcaca atgtagtgtg acccatctgc tagtgtgttg
8881   tggcatcatc aaccctcttc ttccgctcgt ccatgccagt cagcacatca gggagactta
8941   aaacgtagta cctgggtcct gggccaacat actgttttca ttaggactga aatcatagaa
9001   ttctttatca ggccatctta tgtctgcttg caagaataag cagacaaggg gattttgat
9061   ggtagttctg cattcatctt gatcctggct tcttttcatt gcatagaaag ttggctgcac
9121   ctggtacctg gttgaagcca agtggtttta ggagaacaat acttggggga atgcatctag
9181   tttgggaagg gagaagtggg gtggaaagcc aatcttacct acctacaatg ctctcacccc
9241   accggagccc ttccccagaa gcctgagcct cacactctgt gttgtctttc tagtgggaga
9301   agttgcagat gacgtccagc gagcgcagga agatcatgtg ctcagtgaca ttccacgtca
9361   ttgccatcac atgtgtggtc tggtccttgt atgtgctcat tgaccgtact gctgaggaga
9421   tcaagcaggg gcaggcaaca ggtgagttct caggctggag caagctcagc atgggggccg
9481   ggatagctca caggagtcct ggggtcagag gattttccag ttagccaaaa acgtctgggt
9541   ttccggagga gggacatcag ttaggaggca ctagcctcct ttttggcatt tcttttgctg
9601   tggtggtagt ttttgaaacc cagtcaggag agttcatatt ctggagcatg agaatctccg
9661   caaactacat cctataaaag caggaagtag ctggacactg tcttccactc ttctttgact
9721   gagcaacatt ggatgagttg tgaatccatt ggtcagtggt gcaggcttgt ggtccccaga
9781   tacttgaggc tgagggatgg aggattgctg aggctcagga gttcaaggct gtagtgtgcc
9841   atgatcacac ctgtgaatag ccactgcact ccagcgtggg caacatagca agactccatc
```

FIGURE 2 (cont.'d)

```
 9901   tcttaaaaaa  caacaacaac  aacaaaggtc  ttcaccaggg  atctgcctag  gtcagcgagg
 9961   tggttcatca  agannnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
10021   nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnggagtgt
10081   acttcacccc  gtggtgaaga  tgcggcacag  actggcgttt  cctacggcgc  cttcactgga
10141   aagcgcccct  gtggtcctgg  ggagagggcg  gctccatccg  ccacccttcc  cggagctgcc
10201   cccgcccatt  ctcatgggag  gaaatcgcag  ggcgtgtgag  cccccgaccc  ctcgccccca
10261   cctctgccag  gaccggccgc  atttctgcac  tgtcccgccc  cactgggaag  gaaactctct
10321   ttctcaattt  cctttaatga  ggacattgtc  ttttcagccc  tgccaccccc  tgcaatcgtc
10381   ttccaggctg  caaacagcga  gtggggaggt  gaacacatca  gcttttcctc  cctccacacc
10441   accaggaaat  ttcgcaaacc  acttggctct  cggcggcctg  gcctcgccac  acctgtgccc
10501   acagtctctc  tccgctgcag  ccccctgtgc  cattctccag  gccccacgta  cctctgcctg
10561   ggcccagtaa  gacctggtca  gatggccccc  ggctgcaaag  ccttcctggg  ccccatcaga
10621   gaggacgccc  aggtgaagcg  agggtcccct  gcccaccctg  caagcgcagg  ggcccttcca
10681   agagtgcagc  cctaggccgg  tgtgtgatgg  tggagacgcg  gtcccagagg  gcctgaacca
10741   agaatggaga  agacaaaggc  tgtctttagg  gagaaacttc  cctgaggggc  tgatgtgtgc
10801   gatcccattt  taatctcaca  accctgggga  ggagctgggg  ccgggtctca  ttgttcattt
10861   gaggacaccg  aggctcaggg  aacttagacg  actttcctag  ggtcccccca  acccccaccg
10921   gcccagggcc  ctctcccagg  cacccctcat  ccccacacag  gctcctctaa  gctgcttcct
10981   tgtggtccag  ccccccttggc tcagctcctc  aaatacaggg  acacctcttc  tctcccccgc
11041   agaactcaag  ggtctccatc  cactgtgcca  gcacagaggc  ggtgctcaga  gtggggctaa
11101   gcttactgtc  cagcctgctg  ggccaggagg  ggcagaaggg  cccctctcag  gattccttcg
11161   ctctgctcct  gccaataggc  catcactcaa  ggggctaatg  acaggacgat  gtggagaaac
11221   gtgggctgca  gcacttctgg  ggccaagggc  agggtgggcg  gcactgggga  gtacagggga
11281   ggggacctca  ctggggccag  aggcttctag  aagcttctgc  aagaaggggc  ccctcaccca
11341   tgtcttggcc  aagaagtggg  gagggtgggt  gtggcaaagg  aaacagctag  gtcagagaca
11401   agagatgctc  tgcaaagccc  tgctggctcc  ccacggtgga  gcatcctatg  catgtaggac
11461   ctgagagatg  gcaggggcgg  gtgcgtccct  atggatgtat  ctccatttct  gggcagagac
11521   atctgggctc  tcacctgcaa  ttgagccaac  caagaaatta  tatttacttt  ttagagcgag
11581   cctccaacaa  attatacaag  cacttgagaa  taagccctcc  cactgtcttg  agagatggag
11641   cccaggagg   cagctggaaa  gatgctcctg  ccctcactca  ggagagatgg  tggagctggg
11701   agaggaggag  gcactccctg  ggacccagca  gatggacttg  actcagcaaa  tagatgcaac
11761   catatgtggg  gggtgggggag gcccagaaag  gcattacagg  ccagtgttct  taatcctggc
11821   tatacactgg  aatccaccag  tagccctaaa  atataactgt  gctggacttc  ccctggttcc
11881   acagtttgtg  cagagtcgggc agcatggagt  ctgtaacact  aaacacacag  gattgagaac
11941   catatgtcta  ggctgttgtt  agccatgatg  gggatacatg  aaaaggaggt  gcacagttac
12001   cttctatacc  acaggatagg  tgctcattaa  accctgttaa  aatggactgt  gacccagctg
12061   gcactcaggg  gcactcaggg  gccaggtggg  tcacactttc  attttaatag  gatttaatga
12121   gcacctattc  tgtgacagct  gctaagatac  agaggctcct  gagatacaga  gatgacaatg
12181   accttcagaa  acactgaaca  gagataagaa  aggcacagtc  tggccttcac  tccaccatta
12241   attcctccat  ccatccatcc  atccatctat  ccatccatct  ctctgtctat  acttccatcc
12301   atccaccatc  cattcaccat  ccacccatca  atccatccac  ccatctatcc  atccatccat
12361   ctcactatct  gtcatccatc  catccatcca  ccatccatga  atccatccat  ccgtatatca
12421   atttctcatc  tatctctcca  tccatccccc  atccacctct  tcttccatcc  ttcctccttc
12481   ccttcatcca  tccattcatc  atccatccct  caacccatcc  atctgcctgt  ccatcggttt
12541   gattgtccat  ctgtccagta  ttcctccatt  ccctccaaac  tgggtggcag  tactctccac
12601   ctcactacct  caccatcctt  attattccct  ccaaactgtc  tctttcacaa  gggccttctg
12661   tcctgcctgt  cccatcctgg  tctgggacct  atcccactaa  agctacatgg  ctttgatcaa
12721   caatcccaat  cccagagtag  gggaagggaa  gtgagcccct  aactgccgtg  atgtttccag
12781   ggagatggtg  gatactgctg  cattactaat  ccagatgtta  ggtttttaatt tttctctcca
12841   gtagacccca  attgtggtag  gagaaaaatg  ccccagcttt  ggacacaaac  agacctggat
12901   tcaaatcctg  gtttttgccaa  tttctgccta  aatgacttta  ggcaaactcc  ttgaccttga
12961   cccccttggag  actcagtttc  ctcacctaga  aatggtcaat  aatattattt  acctcccagg
13021   atggccatga  agcttaaaat  agattattgt  acccccccaaa acaccgacac  aatgtttaga
13081   aataaataat  attattttaa  gctttgaagt  ctggctgggt  tctcagcctc  gtctacctgc
13141   tgggtgtgca  gactcaaagc  cagggtccca  ccctcataga  ctgtcatctg  tgggtgtggg
```

FIGURE 2 (cont.'d)

```
13201 gttggcctgg cactagcagg tgctaatgct cctcagagga ttctaggtgt aaaaggaaat
13261 gaaaatcttt ggaccccaat tcactctgcc aaaagggaaa aattaagctg aaagctgagt
13321 gatgcaagaa acgaagatag ctacagataa aaggtgaaaa cctccacagg tagctcttgg
13381 tgttcacctt atcaagtgct gatgtactaa gcgcaagagg aatacataac tgactattcc
13441 cctacctgct ccttttcttt tgcaacatgt ggattcagta acgtgaccat gccctccctt
13501 tcttccttcc agcctgttct cctttaaata ttgatgccct aaaagacatc ttcggaaaaa
13561 ggcacagtcc accaactgtt cctgtggatt tgtgttcctt ttttccgtgt atgtcttttt
13621 ttttattatt atactttaaa ttctaggata catgtgcaca acgtgcagga ttgttacata
13681 tgtatacatg tgccatgttg gtgtgctgca cccattaact cctaattagg tatatctcct
13741 aatgctatcc ctcccccctc tccccacccc atgacaggcc ctggtgtgtg atgttcccct
13801 tcctgtgtcc aagtgttctc attgttcaat tcccacctat gagtgagaac atgcggtgtt
13861 tggttttttg tccttgcgat agtttgctga gaataatggt ttccagcttc atccatgtcc
13921 ctgcaaagga cattaactca tccttttta tggctgcata gtattccata gtgcatatgt
13981 gccacatttt cttaatccag tctatcggtg atggacattt gggttggttc caagtctttg
14041 ctattgtgaa tagtgccaca ataaacatac gtgtgcatgt gtctttatag cagcatgatt
14101 tataatcctt tgggtatata cccgataatg ggatggctgg gtcaaatggt atttctagtt
14161 ctagatcctt gaggaatcgt cacactgtct tccacaatgg ttgaactagt ttacagtccc
14221 accaacagtg taaaagtgtt cctacttctc cacatcctct ccagcacctg ttgtttcctg
14281 acttttttaat gattgccatt ctaactggtg taagatggta tctcattgtg gtttttgattt
14341 gcatttctct gatggccagt gatgatgagc atttcttcat gtgtctattg gctgcatgaa
14401 tgtcttcttt tgagaagtgt ctgctcatat cctttgccca ctttttgatg gggttgtttt
14461 tttcttgtaa gtttgtttga gttgtttgta gattctggat atcagccttt tgtcagctga
14521 gtagattgca aaattttttt cccattctgt aggttgcctg ttcactctga tggtagtttc
14581 ttttgctgtg cagaagctct ttagtttaat tagatcccat ttgtccattt tggcttttgt
14641 tgccattgct tttggtgttt tagacatgaa gtccttgccc atgcctatgt cctgaatggt
14701 attgcctagg ttttcttcta gggttttat ggttttaggt ctaacattta agtatttaat
14761 ccatcttgaa ttaatttttg tataaggtgt aaggaaggga tccagcttca gctttctaca
14821 tatggctagc cagtcttcac ccggggctga aggtaccgct tnnnnnnnnn nnnnnnnnnn
14881 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
14941 nnnnnnnnnn nnnnnnnnnn nacaatgaga acacatggac acgggttggg ggggtatcac
15001 acactggggc ctgttgggct atgggggggct ggggagggat agcattaggg gaaataccta
15061 atgtagatga caggttgatg ggtgcaacaa accaccatgg cacatgtata tctatgtaac
15121 aaacctgcac attctgcaca tgtaccccag aatttaaagt ataataagaa aaataaaaat
15181 aaataagtta aaagagatta aaaaaataaa agagaacatt tgccacattc agtctttcta
15241 gatggaaaga ggttgctgac atatgataga attagaaaat cacacatctt gtaaattctc
15301 atttgtttaa aaagaaatca tacaaattag atgttttttg gagatgactt tttaaaatag
15361 agtcgttaga tcacctctgt aagggatatg tctatatctg ttcagtgggt taggggacat
15421 ggatctggaa agcctgagaa gaaaaagaag gttctatacc agacttgtga tatttagaca
15481 ttttcatatt ctatccattg tttttgtgtgc attttattcc tcactattgt atatatagtt
15541 gacaatgcta aactttttg tgtattcttt ctatgtgttc cgaatgccta atatatgtca
15601 aaattagcgg tagtaaaata atattttgta aatatctttt tgctaaaatt catatgaaat
15661 gttgttttg gaggggaatg gccaaactac ctgttgagta atactcatcg tgtttgtgtc
15721 ctggttcagg ggaggaggaa ggaggggaaa gtgcagagag ctctatgccg ctgtgtttac
15781 agtgaggcaa gattaaccat tatctcttat gtctgtgcat tttgtttac ttatctgttt
15841 atgtagtgta tataaaggac aaacgagtcc taatttacaa catctagtct ttttagatgt
15901 taaagaggtt gccagtgtat aacaaaagta gagttagtaa actaatatat tttgtatatt
15961 ttgtttaaa attcctagga aagattgtct tcctatcttt gagcattctt gcgcactgag
16021 ttgatggaga tgggagggat tctaagctag gatgttctta tttggaagac tctttcaaat
16081 tataactatg gttacatgta tgcagtttat tcgagactgc tgtgtatata gtggacaaat
16141 taactcctta cttgaaacac ctagtttatc tagatgttta gaagtgcctg atgtacgtta
16201 aatgtagagg taataaaaata ccactttgta aatatctttt tgctaaaatt cataggaaat
16261 actgtctttt agaaatttaa ttgttaagcc acctttgtga gcagtatagt actgtctata
16321 cttgttcaat ggtttagagg aggtgggagg gaagaaaaat atgtgactga cttatttcac
16381 taagcctaat gtctttaagt ttcattcatg ttgtggcatg tgtcagaatt tccttccttt
16441 ttaaagctga ataatattgc attgtataga tatattacct tttatttatc catttatcca
```

FIGURE 2 (cont.'d)

```
16501  tcaatagaaa  cttgggttgc  ttccatattt  tagctatcat  gaatattgct  gccatcaaca
16561  tgttgagttc  ctgtattcaa  ctctttgggt  aatacccaga  agtgaaattg  ctgaataagt
16621  atggtaattc  tctgttaaat  ttttgaggag  ctgctgattc  atacttttac  gtataaaata
16681  ttagacctta  aatgtattat  gtaaaaacac  taagtatttt  taacattcta  gagtaaagaa
16741  ggtgtttctt  agcaagacag  aaaagctgaa  accctcaata  gaaaagcctt  gttaatgtta
16801  tcacataaaa  tattcaaaat  ttctgaacac  acagacacac  acgcactaac  gaaaagctat
16861  ttacaacttg  tggtagatga  agaaataatt  tcttaacata  gcaagaaccc  aggcaaatga
16921  ttaagaaaaa  gaataatcat  acaaatttaa  tacatgtgag  aagctgttca  gcctttccca
16981  ttaattaaag  aagtaaaata  taaaacaaaa  catataattt  ttcacttagc  agagatgaaa
17041  taccaaaaca  gatgggtata  ggtgtggaac  atacttcctt  ggttgacagt  tagccaatat
17101  ctattaaaat  cccttgccac  agtaatttca  gttctagaca  tttgtcttat  attactgtat
17161  ttattctgtc  ctgtaaccat  aaattccaca  gctgcctagt  gatggttcta  tatttaaatg
17221  gaatgcttac  tctcagtatt  gttttttctt  ttgagatgga  gtcttgttct  gttgccaggc
17281  tggagtgcag  tgccatgatc  tcagctcact  gcaacctcca  cctcccaggt  tcaagtgatt
17341  ctcctgcctc  agcctcccga  gtagctagga  ctacaggtgt  gcaccaccac  gcccagctaa
17401  tttttgtatt  tttagtagag  atggagtttc  accttgttgg  ccagtatggt  ctcgatctct
17461  tgacctcatg  atctgcccac  cttggcctcc  caaagtgctg  tgattacagg  tgtgagccac
17521  gacacccagc  cagtattttt  tttttaaac  cacagcttct  tcattttgag  tcatctctaa
17581  atagctgcaa  tttactataa  cttagggttt  acaattttta  aaattgtgta  tgttaaggta
17641  tccacatgat  gtttgatata  cttctttga  cataaatata  cacaatgaag  tgattactac
17701  agccaaataa  tgattaccat  accccatcatt  gctagcgttt  agaaagacaa  ctgattttta
17761  tgtgctgata  ttgtaccctg  caaccttact  gaattacta  aatctagtag  ttttttggtg
17821  catcctttgg  gattttctat  taacagaatc  atgccttctg  caaatgtaag  taatttagct
17881  gcttctttt  aaatatgtat  gcctcttatg  tctttttctt  ggctatgttc  ttttctctgg
17941  ctagaacttc  tagtacaatg  tccagtgtca  gtgttgaaaa  tgggcatcct  tgtgttgttc
18001  ctgatttttag  gagtaaagct  tacagttttt  ctaccccctga  gtatgatttt  agttgtgaga
18061  ttttcctata  tgccctttat  catgctaaga  aagttcccctt  ttatttttagt  ttgctgatttt
18121  tttaaaatta  tgaaagggca  tttaattta  tcaaatactt  ttttctgtgt  ctgttgagag
18181  tttggccatt  tttttttctat  tgaaatggtg  tattatggta  gctgattttt  ggatgtgaaa
18241  ccaaccttgt  gtccttggga  taaatcccat  gtaatcatgg  tgtataattc  tttctatgta
18301  ttgctggatt  tggtttgcta  gtattttgtt  gggaactttt  gtgcccataa  gataagaggt
18361  attgatctat  ggttttcttt  tcctgtgatg  tctttatttg  gtttttgtgt  cagggaaata
18421  gtggcttcat  aaaatgttca  agaagtgtac  cctcctcatc  tttttgttgg  aagagtgtga
18481  aaaattggta  ttatcaaatg  tttagtagaa  ttcaccagtg  aagccatttg  ctttttctttt
18541  tgggtagttt  ttgattactg  attcattctc  ttaatttgtt  ttaggtctat  tcagattgtc
18601  tgtttcttct  tgagtcagtc  ttggtagttg  tgtctttctt  gaaattttt  catttcactt
18661  aaattatctt  atttgtcagt  gtacaattat  ttttggtatt  cctttataat  cctttttatt
18721  tctttaatgt  cagtagtaat  gtctcttctt  ttatttctga  ttctatagtt  tgagttttct
18781  ctcctctttc  cctgatgaaa  ctgaagtttt  ttccatttta  ttgattttt  tcaaacgatc
18841  aaattatttc  attaatttgt  gctgttatca  ttatttcctt  ccttctgctt  acttaaattt
18901  agtttcatat  ttttttgtaag  tgtcttaagg  tagaatttta  agttattgat  ttaagaactt
18961  tcttaataca  agtgtttaca  gctgttgata  ttactctaat  tacttcttta  gctgcatcac
19021  aattgttttg  gtatgttgtc  ttcattatta  ttcgtctaaa  aatattatct  aatttctgtc
19081  ttgatttctt  ctttgactca  tgaattgttt  tagagtggaa  atttcatttt  aaatttccaa
19141  atatttgtga  atttcccaaa  tttcccctgt  tgttgatttc  taattttatt  ccattgtggt
19201  taataacata  ctttgcatta  tttctatcct  tcaaatttat  tgaggtgtgt  tttatggcct
19261  aatatgtggt  ctatcttcta  gaatgttcca  tgctcacttg  acatgaatgt  atactttgtt
19321  gttgttgtta  agtagaatgt  tccatagtcc  ttgaggtcta  tttggtttgt  agtattgctc
19381  aagtcctctt  tttccttgtt  gatccgtcca  gttgttctat  ccattttga  acgtgtagta
19441  ttgaagtcct  tgactatttc  tgttgactcg  gttgacttgt  ctatttcttt  cttttctcag
19501  gtctgttttt  gtttcattta  ttttggtgct  tcatatatat  aggtgcatat  atgttgataa
19561  cagtatatc  ttcctaatgg  atggattcct  ttgtaattac  aaaaggccac  tctatctcta
19621  gtaacaattt  ttgtttttaaa  gtctatttgt  ctgatatcag  tgtactgact  ccagtgtttt
19681  tgtggttgct  gtttgcataa  tatatttttc  ctgttctttt  actttcattc  tgtgtcttcg
19741  aatcaaaatt  gtgttttctc  cagacaatat  atacttcatg  ttttcttatc  caatataaca
```

FIGURE 2 (cont.'d)

```
19801 cctttgcctt ttgattgcat tgtttattcc attcacactg catattatta tttagtggga
19861 tttatgtctg tcattttagt tcttttttgt ttttgttttg agacagaatc ttgctctgtc
19921 acccaggccg gagtgcagtg gcgtgatctc ggctcactgc aagctccaac tcccgggttc
19981 aggccattct cttgcctcag cctcccaagt agctgggact acaggtgccc accaccactc
20041 gtggctaatt ttttgtattt ttagtggaga ctgggtttca ccgtgttagc caagatggtc
20101 tcgatctcct gacctcgtga tctgcccacc tcggcctccc aaagtgttgg gattacaggc
20161 atgagccacc gcacgcccgg attttttgtt ttttatatgt atcatgtctt tgttgttcct
20221 gttttgtctt tacttctttc tatttcattg aattaatatt ttctaatata gtatttaagt
20281 tttattaata attttatcac tgtattttta tttttagtgg tttctctagg attttctgta
20341 tatatcttat cagtatgagt ttcagattca cactagctta attccagtaa tatgtagaaa
20401 tgttactcat gtagaactta attctcttgc tcttttgtgg ttattttatt tatattatat
20461 caattaatgt tacaaagata tacattgttt aaattattat tggtgctatt attagcatac
20521 ataacaccca catattaaaa ttgtatatat tgcatatatg tattatagaa ttgtatatat
20581 tatagggcca atagtatatt gtatacatgt tattttatat aattgttttt aaaatgagtt
20641 aagaaaaaag aaaaatgcat ttctactgtc tattatagaa aaataattac atcatactga
20701 acgtcttcac cnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
20761 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ngctctaata
20821 aatttgcggc cgctaatacg actcactata gggagaggat ccgcggaatt cctaaaagaa
20881 ttgctgagac aaagtatatg tgcctttgtc atcctgaggg cagttgtcat cctgtggagg
20941 tttaccattt gctctcccac cagcaatgta taagcatacc tgcttcccaa cacttccgcc
21001 aacacatatt atttgattaa ttttcttggc tgataatggt atctcattgt agttttaatt
21061 tgtatttctc attgtgagag aaatgaagca tcttttcatg ttttgagagc catctgtgca
21121 tcttttccca ttgtttctgt taagtcattg atttgcagta ctgtaatttg tgatgagttg
21181 taaacatgag ctcttctggc ctcttaacca tccttatcca gcctgtcttc acgttcctcc
21241 ttgcctaaaa acaagctcac tcaaacagat cattcctgtg gccctctccc ttttgaaata
21301 aatcagatgg gcaaatttgc ttttgttagg ggcctgagac ccaaatgttt aaaagtagct
21361 tagctgatga gtgaaaagga ggcccagttg ggggttgcac agaaaatgag gggcgtgggt
21421 aatagaggag gctgggcagt aacctggcag aaggcgccag aggccaagga aggtgcgctg
21481 gtgtcctgca gtgagaagga tgtgtgcact atcaactggg taaacacact gctatagctg
21541 ctccagcgac agcaggcact ctcagaaggg aactgagaaa aggggaatgc cagtttctgc
21601 caaggatata tggaaaagtt ttttttcccc gtatgttctt tggcaacctt gttaaaatca
21661 tttaaaatgg tgaatttgat aacaaagcca gccactaaaa gacttggatg tagcaaaaca
21721 aattgtcaaa aagtatttat catttctaag aaataaaata aactgggatt taggcttgga
21781 tagaaatcca gaggtttgtt ttggcataat taattacaac atctgaagaa gggaggattt
21841 ttacaagaat tttttttttt gtagtgagat tgctttatat tccttttcat gactggagag
21901 tctgtcattt ggcaacccgc aaagaacttc aggaacagag ggcctaagtt ttcttgacac
21961 atttggattt ttgcatgatg aacatttgca cttttattag taattgtcga gtcgtgtgtg
22021 gtctgatcct atggagagga gagtgtaggt gtnntctctg gagctagtac ntgcccccgn
22081 gctcacacgt gccacactgc ctgctgcttt cangaaaag caggacggct ggtcctgtcc
22141 catctagtga ggtcctgtcc catctagtaa ggttctgtcc tcagagctcc taagagggga
22201 ttgctggcct ttgattacac tggcttccag aatctgacca tggaaccatt atttgaagct
22261 gtcagcttca ttttgttgtt gatcaggcca gtcttttagg tctttgttgg ttgatagatt
22321 tctctcaggt ctatagcagc aacaaataaa gctctttaaa attattttct tgaccattct
22381 gcctatggat tggttctgac ctttgaaatg tttgctgtcc tttagatcgt gacagaagga
22441 gcctcttctg ggagctgtga agacccaca gatctcactg gtttcttgc ttttattgga
22501 agagttagca tttgttgaag tttatattta tgtaaaataa caataagtag attttaaaat
22561 ttttctttaa attctgtgat ctaataagaa gagagactct ttctctgtca ttgggaggct
22621 tgatgaggat cggacatacc tgctgagagt atcctgtaat gttttcataa gattggaaat
22681 ggtgaaatga gagcagaaat gtaggcagag gatgccaacg ctgtttccta tttcctaagt
22741 aaaactgagc agggcagaat ctccccagcc ctgccagaac tcccttcctc cttgggtccg
22801 ctgtcactgt catgctggcc ttgacatctg ctacaagtgc acacacatgg ggaaccacac
22861 agggaagtga acacatgtcc tgacgtgtgt gtgtgcctgg tgtggctgct tccttgatcc
22921 aggctttgtt ttgttacgag gctctgccct cctaccttca ggccttgctc ctcatcatgg
22981 gcatgcaagg atggaatcgt taccccagag tacactttt gacttggatt acttgtagtt
23041 tagtactgga gttcagaact ttaatttccc atcagaaacc tgcctcccgg acccaggaca
```

FIGURE 2 (cont.'d)

```
23101 ctgaccttga ttgggcacga ttttccagat aagaccttac ctcctcccaa cagggtttgc
23161 cttcccttca gaatacagga aagtacacgt ggttccaaga ggaccatgct cttactaaga
23221 taaaagggag gagggtgact aggtactttc ctctgctgcc atcccttgaa ggaagggggc
23281 ttccttcaat gcctcatcag ttccagggag tatgcttgac ccagcaacac agaggaagaa
23341 gtgacctcat agcaatgagg ggcaagcatg tggatattgc tgggtatttc ttcctcaaag
23401 tctacctggg gacaggtgat gaagacgctt acttctctgc aatacaccgt gatcaggctt
23461 tggtcttcat gacacatttt agccttgcct atgtgtgttg aacagagctg gtcatcctca
23521 gaaataaaag aagagagcaa taagtacagg aaggctttca gtcccagaat agtgttagga
23581 ctaaatgtca gagaacaggg ggactgtagg agtttgggga ccttagcatg gataccctct
23641 caatctgctc ccctgtggta taaacagtaa agcccattgt actaaaaggc cttgagtgct
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23761 acagtgtcta aggcagttgg agaaaaagga caatggctta tgcagtcagg cctagaagat
23821 gcaagggatg tcacagcata gtgtccacag gcatccctag atgtctttca ttttgtttca
23881 ggaagaatat tgacaaaggt agtgatggga gggttatttc aaggatgcta ttttcatgtg
23941 tccaagtaaa cttaagattc ctaagaactt tgacctctaa tgcttttaaa gaccgtgtac
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24121 cttcttggat cttgtttctt caggtggact tgcattaaag tgctgttgaa tctctgcact
24181 gggagtggga gcagccatgc gatgggtgcc ttaatccgag tgccatcctg gctctctcca
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24301 tgttctggtg gttgaccaag ggtcgggggt cccaaaggtg gagttccagg atgagagtgc
24361 acccttgggg atggtactta gaaagagtgg ggactaggcc tcagccaggg aatggtgggc
24421 cagggtggag ctcctttgta tcaaggagtt agggccaagg gccatgcagg tgggcctgca
24481 gaaggtgggt ggtgatatgg cctttctggt gataacagac tcgtggcact gttttcctgg
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24721 tgtccctatt tctctctgtc catttcctc ctcactgcag tgcttcctct ccttcctaga
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24841 ttgctgtact ttctttcaaa tctaaatttt cttgattatt tttcttaatt tacagtttca
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25141 ccagtgccag caggcctgga gcctcatatt tctttggcat ttgtatgata ccttctagta
25201 cttcgttttt tgacttatat atgaactaac tcaatttaga tgcttagaaa ataaacggcc
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25321 atccacagat aagaaaaaaa tagtgatatt tgatttgttt tgccaaggct tagaaggatc
25381 taatatgtgt tactcgttga gcagcgggaa gcagcagaca tttctagggt ttctccctgt
25441 caccattcag gagacagtgc acacaatccc cttggctctt acctgaacac tgaccacagg
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25621 tgctgccatg atcagtgtgc agccagaaat aagcattagt gtctgtaggt tcttgaattt
25681 ccatttgctt aatcaatctg cctttggtct aaacagttgg cgagttttat gtgtggtttg
25741 ctcaccaagt tacccatgct agtctcattt cttcactatg atgtctattc tcttttaaaa
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25981 tcaaagagaa attcctttgg ttcagaatgg gcccaggcct tgaagcctgc taagaatacc
26041 aaagccagaa gaacactaaa gttctcaagg tccctcaatg atgtgggtga gaaggcgcag
26101 gatacttcag aaagttttgc ctatgtggaa agaacttgtt ctgaagggaa attaatactc
26161 cctcaagata cgtgtctcag aactaacagg tttcatcata aagaaaaaag aaccctgaac
26221 cacaaacctc ttggcaattc caaacattct tgtgtttcat gcctttctgc cggtcgctca
26281 actgcctcag aggtggaagc tggcaagggg ggcaggcccg gctgctgct ggaagagaag
26341 gcggatggtg aggccacgtc ccgaagccgg caactgctcc agtacctgtt ctcactctcg
```

FIGURE 2 (cont.'d)

```
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26521  atgggagacg  acgatgtctt  tgaggacagc  acatctgcaa  aactgaagag  tagggttctg
26581  cgggcgcccc  tctgctccac  ggaaaaggac  agcgacctgg  attgtccttc  tcccttctct
26641  gaaaaattac  cccccatatc  tcccgtgtcc  acgtcagggg  atgtctgcag  gttggtttgc
26701  caggaagtgc  cattctagcc  atctctgctc  gcatcaggaa  cctcctcttg  ctttagtatg
26761  tgaagtttca  ggaaaatgaa  gtaataggaa  gttgtaacca  gttgtgggtt  gatggttttc
26821  tccagaagaa  tggagtatca  atatcgtttg  aaaaacttaa  tttttatgat  gtgagtccca
26881  agatagtttt  acaaatgata  aaagaggaag  aagctggctg  ggcgcagtgg  ctcacgcctg
26941  taatcccagc  actttgggag  gctgaggcgg  gtggatcacc  tgaggtcagg  agtttgagac
27001  cagcttggcc  aacgtggcga  aaccccgtct  ctactaaaaa  tacaaaaatt  agccgggcgt
27061  ggtggcgggc  gcctgtaatc  ccagctactc  aggaggctga  ggcaggagaa  ttgcttgaac
27121  ccgggaggcg  gaggttgcag  tgagccaaga  ttgcgccatt  gcactccagc  ctgggcaaca
27181  agagtgaaac  tctgtctaaa  aaaaaacaaa  acaaaacaaa  aaaaaaaaga  ggaagaagct
27241  acacatatta  aaggccaagc  tgactcttct  aaactaaaaa  taagtagact  ttgcataaag
27301  aaactggaag  aaagaaacta  gtatcttcag  ttttccagcc  tgatggtcca  gattttaagc
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27661  tcactaaaac  agcctgagag  cctggctcct  tccaggacga  gtgccccaac  ctgttctcta
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28321  tactgccagg  ggcggcgggt  gacgacaaaa  ccctcggtgc  gccgcgcctg  gcagtccgcg
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28441  ggccgtggcg  cccgggcgct  gaccactatc  attctccgcc  acacggacga  aggcaggagc
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28561  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
28621  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnngagg  ccgggcgagc  gcaggcgggc
28681  ggagagcaga  ccacgcggaa  gaggccgaga  gagaaagcgg  ggcacccggc  cggggggggtc
28741  atttacaagg  gacgctgggc  acgaaggagg  ctgggcgaa   gatgagtcca  ggggttgggt
28801  tgagagcgct  gcgcagccgg  gctgagaaga  gaagctgacg  agtgactccc  gacaagggac
28861  gggggagagg  gaacctgggg  gcaggcagag  gcctaggggg  tgggctctga  gggcagccac
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28981  agctacatgg  atggcagcgt  cctgaagggg  gatgatcggt  agggagtggg  tgcggaggct
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29281  ggaagggagg  gacgtagcag  caggaggaag  ggtgaggacc  caggctgggg  atcgggagaa
29341  gtgatggcgg  aggaaagaga  ggccggaaga  ggaggggggcc  tgctggcctg  gcactggaaa
29401  gcaaagcgtg  ggtttgtata  tgggaagaag  accacatccc  ctcttatcgt  catcccaact
29461  cagaaaccat  ttggccccaa  gtcaccaaag  cactcatagg  aaccactttt  cctgtgacac
29521  aagtaggatt  ctcccacttt  taacttccca  aatgctaccc  gaaagcctct  gaaatccttg
29581  gaaatttaaa  aaataatccc  cttctattaa  ctgatgccta  taaaacatat  tgactttcat
29641  taaattttgt  tatgaaatca  gggatgtgtc  ccattgtaaa  ataaatttgt  ttggaaaatg
```

FIGURE 2 (cont.'d)

```
29701  tagggtggta  tcccatctaa  aaatcagacg  aggctagaaa  atttcaattt  tatttgctaa
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29821  gaagtcatgt  ttccctcaaa  aaaatgattt  gttctgtagt  caaattaatt  tggaaaacat
29881  tgcaaactct  tcagcagtgg  ttctcaaagt  atagcttgcg  tcagaatccc  ctggggccct
29941  tgctaaaatc  tggatggcta  cactccccgc  ctagagtggg  ttaaactcag  tgcccactgg
30001  caggaaactg  aaacttggct  gaagtcaccg  aggaggcctt  ccccgttaaa  cctctggctg
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30121  ccacctgctg  tacctggaag  ggggccagcc  ctcctcagca  ggctttgctc  ctgccctgca
30181  cagcacaact  gtggcgtaaa  aaatggaaaa  gctggtagca  gaaggaaaga  gcagggagac
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30421  ggagaaagct  gaagatgcag  gagaaagcta  ggtcactgcc  cctaggccag  gtgatcaagg
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30841  accctctggc  actgggccat  cttcaggccc  tacagggctc  tcggggcctg  cgtaggcctc
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31081  gctggtcgta  gccatggtga  gaccacagca  gcctccctgg  aagcaagcac  ctgtgtaaaa
31141  gcccctcctt  ccccacaagg  ggctggatcc  aagtgaagaa  ggtaccagaa  ggactggaag
31201  atgatgctgg  tattattcga  cagctccagg  gtgctgtagc  actgagcacc  tactgtatgc
31261  agcccatcac  aaagccagcc  acactgccca  ggctgtgcca  tggcaacttc  cagcagtaca
31321  ccctctcggt  cacctgcagg  ctccttgttc  atcctgacac  atgaggagaa  aaagacagta
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32101  ctacagagga  aatgaacaga  gacagcatca  ctccagtgag  ccctccagat  acaccccatg
32161  tgcgcagtaa  gagaatggca  tagtctattg  ggacagccac  atcaaaatac  cacagaccag
32221  atggcttaaa  cggcagatat  ttgtctctca  caggtccgga  ggctagaagt  ccaagattag
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32461  ctaaccctaa  tcacctccca  aaggccccat  ctcctaatgc  catcacactg  ggggtcaggg
32521  cttcaacaca  tgaatttggg  gagcacaatt  tagtccacag  cagaaaagaa  aggggcacag
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32641  ggggcaacca  gagtcaaggc  tgaagagtgg  gcagtgattg  agcactgacg  gtggagaggc
32701  aacaggctat  cttgttaatc  tcagtctttt  gtgtgccaga  gagagaaact  gaggcacagt
32761  gtgtcatggt  gaacactggg  cagcactccc  acgctcctgt  cctgcactct  gcagggttat
32821  ggaggaagcc  tgggaagtct  ctcccctctt  ttccaccttt  cctggaccca  tcccacaccc
32881  tgcctcctcc  aggaagccct  ggggattgct  catacactca  catctcactc  cttagtacct
32941  gcagcctgca  ttctgaattt  agcaagctct  ggccttgggt  ttctattttc  ttgtcctgtg
```

FIGURE 2 (cont.'d)

```
33001 cagtgagcat ttggaaactt ctcctcagca ccaaacacgg agccatttag cagaaaatac
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33121 agctggatct ctgttcgtag aagctttctc agggactggc ccaccgagtg ggggactgca
33181 agtgcccgat gagtgaatga atgaacacat gtgtgaatgg aattcaaggc actgcaggct
33241 attctggagg gtactggcct gtctcttcga caggtgaggt gcagtagaac agcatcccgt
33301 atagatgcca gtttctgacc tggttctgaa aagccagtca cctacctctg cagagctgcc
33361 tggaggggggc ggggggttgtg aggacccctg agagcttggt gtgaaggggc tctgcagagg
33421 gaggcatggc tagtgtgcgc aaggtgacct ctctcctggt ctgcaggatg gagaacctgt
33481 tcatcaaccg cttcatgcac atgttccagt cttcttggaa tgacttcgcc gactttgaga
33541 aaatctttgt caagatcagc aacactattt ctggtgagtg tgcctctggg ggcccaagtg
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33721 ctacactcca caccttttac catcactgtg gtcacccttg tgcccagagg tttctcctcc
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33841 cagaactttt tcttggcaca aatcaatcat ttgtgcttct gaacagagca aaggcagaac
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34621 tcctggccag tgctcatagg ccaccaagac gctaactgca ggcccatctg gcctacagca
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36061 ggattctttg gtttcaaatc acaaaaatca actccatctg gtttaatcca agaactctat
36121 tggctcaggc aacagtaaaa agcaatgcta actcatttgg gaccagggct cagatcatcc
36181 cctgcactgt ctctctctcg ctccatgtct caatcctctg cctctggtga ttttttcctt
36241 aggagggttt ccttatgtgg aggtaaaaaa tgatcaccgg cagcttcaga tttaccttcc
```

FIGURE 2 (cont.'d)

```
36301 accagcttag caaacaccac ccactcccag caagaaagac cctgtttccc aatgctccca
36361 gcagatgtct taggccatcc tcgggcctca ctgattctgt gagccagtgc ccacggccag
36421 gagaatggaa tacactgacc tagaggggac agggactcta gacaggcaaa aactccactg
36481 tcagaagcag aatcctaaaa tgtcagaact gaaaggtagg cccgcccctc gttttccaga
36541 aatatgaaag ggaggcttgg gataacagag aaatgctgca ggcattggcc ccaaatctca
36601 ggcctcctat tcccagtatc accttcacca gcctgggtgg tctcaagatt ggattagcag
36661 ccattccttc tgggtagagt ctgatggtca cttcagctct caaagtccag ctatccagcc
36721 atagtcctag aaggcaagac atcactgtgc ccgaccaacc caagggtctc cacctgcccc
36781 cctcaacaca aggtgccctg agtgcctccg cggggatagt ccccgtcccc acccctgctt
36841 cccccgccca tcgcgacaga tgctcagagc tcatccctgg tgtcacacca cataaaggag
36901 gagggcggtg gccaggctcc gagctcctgc cgtcctgggt gggtggcttc tgtcctgcgt
36961 gccgccgggc agcccggggg tcctgcgcgc gggcgcggtc ggtggagctg caggggggcg
37021 ctctgggatg tctccaggca gagtagatac tgacccctcc gcagccggga ccctcaccct
37081 ttccttcatc actcaggaaa cagaaaaggc ttcagaagga gcggccatgc ccccggccta
37141 agcgctgcgt tcccggccca gcaggcctac cctgcacctg gcgttcctag gggcccctct
37201 gcgggaccca ctgcgcggct cgcagcggcc gcccgcctcc cacttcaccg gcacgctcgt
37261 tgcgtgtcga ggtgtgttga ctcctacagc aaagggcacg gatccgcggg tcagcaagcc
37321 cgacgaattt acaccaatga cccgccgtgt cgccagtctc agaccagggc acaacacgcc
37381 aaccctgcag accacccca cctccccagc cactgcagac ccttcccct ctgcttctgc
37441 agcacctgtc ccgaaacacg ctcattcccg cccccgcaga ccttccctac ctcctggaga
37501 ccccctcaa cccctgtaga gtcccctgcc cgtgcagaat cccctcccc ttccccgca
37561 gcccccctac cccaccggc ggacagcccc gctcgcttcc tgttcttctc caagggaga
37621 ccctgtcct ggctctgact ggggttgagt tcgccagttt tgacttatgt gtagagtctt
37681 caccacgggc tggaagtacg gtnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
37741 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
37801 nngagcgtac ttcagcccgg gtgaagattc cttacacctt atacaaaaat taattcaagt
37861 tggattaaag acttacatgt cagacctaaa accataaaat ccttagaaga aaacctaggc
37921 aataccattc aggacatagg catgggcaag gacttcatgt ctgaaacacc aaaagcaatg
37981 ggaacaaaag ccaaaataga caaatgggat ctaattaaac taaagagctt ctgcacagca
38041 aaagaaacta ccatcagagt gaacaggcaa cccacagaat gggagaaaat ttttgcacct
38101 actcatctga caaagggcta atatccagaa tctacaatga actcaaacaa atttacaagc
38161 aaaaaacaaa caaccccatc aaaaagtagg caaaggatat gaacagacac ttctcaaaag
38221 aagacattta tgcagccaaa aaacacatga aaaaatgctc atcatcactg gccatcagag
38281 aaatgcaaat caaaaccaca gtgagatgcc atctcacacc agttagaatg gcgatcatta
38341 aaaagtcagg aaacaacagg tgctggagag gatgtggaga aataggaaca cttttacact
38401 gttggtggga ctgtaaacta gttcaaccat tgtggaagtc agtgtggcaa ttcctcaagg
38461 atctagaact agaaatacca tttgacccag caatcccatt actgggtata tacccaaagg
38521 actataaatc atgctgctat aaagacacat gcacgtag gtttattgt gcactattcc
38581 caagagcaaa gacttggaac caacccaaat ttccaacaat gatagactgg attaagaaaa
38641 tgtggcacat atacaccatg gaatactatg cagccataaa aaatgatgag ttcatgtcct
38701 ttgtagggac atggatgaag ctggaaacta tcattctcag caaactattg caaggacaaa
38761 aaaccaaaca cctcatgttc tcactcatag gtgggaattg aacaatgaga acacatggac
38821 acaggaaggg gaacatcaca cactgggcac tgttgtgggg tgggggctg ggggagggat
38881 agcattagga gatataccta atgctaaatg acgagttaat gggtgcagca caccaacatg
38941 gcacatgtat acatatgtaa ctgacctgca cgttgtgcac atgtacccta aaacttaaag
39001 tataataata aaaaaaaata aataaaaata aaaataaaa gaaaatgaag aaaatcatgt
39061 catttgcagc aacatggatt tggctagagg actttatcct aggcaaacaa atacagaaac
39121 agaaaatcaa ataccacata ttctcactca taaggggggag gtaaacactg ggtactgatg
39181 gacataaaga tagcaacaat agacactggg gactattggg gtggtgaagg agggaaggga
39241 gaaagtgttg aaaaactgtt gagtactatt ctcagtatct gggtaatggg accattcata
39301 ccccaaacct caacatcaca caatataccc aggttacaaa cttgcacaag tgccctctga
39361 atctaaaata aaagttgaaa aagcaaaaat aaaacagtaa acaacaacaa caacaaaaca
39421 gcaaaaccct caataaatac ataaataaaa atataaataa atgtctttgc cagagctttt
39481 tgtttttgt gtggctttga gttagtatct ggggtcacgt tgcttttaag ctgtttgcta
39541 tcaactgcat cctatctaat atttctttt cttaatagta aaccactcaa tttttgtgag
```

FIGURE 2 (cont.'d)

```
39601 gagatattac attgtggttt tgatttacat ttctctaatg atttcctttc cagtttggat
39661 gctgagcatt ttttcttatg tttttgccc attcatatat aattttaaaa gaaatgtcta
39721 ttcaaatcct tttgccattt taaaatcata ttatttttaa atattgtgtt gtagaaatta
39781 tttatatatt ctggatatta actctttatc agatatataa tttactaata ttttcttcca
39841 tccacaagtt ttttttaaca ttgttatgtc ctttaatgca taaaagtttt aaaaagtttg
39901 atgtagtccc aattgtctat tttttctttt gttgtctgta ctttttggtgt catattaaaa
39961 aataattgcc atatcccctt attctaagag ttttatagtt ttagatcttc catttaagtt
40021 ttaaatccat tttgagttaa ttcttgtata tggcataaga caaagtttca acttcactct
40081 ttcatgtgtg gatatccaag tttcccaaca ctgtttgttg aagagaatgt cttccctca
40141 ttgagcggat ctggaatgct gtaaatatta tttgaccata tatgtggagt tttctttta
40201 tgggttcttt attctattcc attggtctat atgtctctct ttaagccagt gtcatgctgt
40261 tttaattact gtagtcttgt aacatgtttt gagatcacgg agcatgagac cttcaactca
40321 gttagttttc aagattgtct agtcagagta tatatgaata tttagataaa ttttttctctt
40381 ttttcaaaaa atgcagctta gattttgata gggattacat ataatttgta gactgctttg
40441 ggttctattg acttttcaaa ttaatacata atgttgtaca gatttgggga atacatctga
40501 tattttggag atcttaacat taaatcttcc aatccatgaa taccaatgtc tttacattta
40561 tttgtgactt ctttcagtac tgtttttgtag ttttcagtgt acaagccttt tatttccctg
40621 gctaagttta ttcctaagta ttttactatt tttgatggta ttgtaattaa attattttct
40681 taattacctt tggattgttt atagttaatt tatagaaagg caactgattt ttgtgtgtcg
40741 attttggatc ctgcaacttt ccagaatttg tttaatagtt ccaacagttt tctggatttt
40801 atgcatatat gcatctaaca gttttctaga ttttatgcag gagtctagga ttttatgcat
40861 ataggatcaa gtcatctgtg agcagagata attttacttt tttcttttat tctttggatg
40921 tcttttcttg cttaattttt ttttcctaat tggtctgctt ggaaattcaa atactatatt
40981 gaatagaagc gaagagacag agtatacttg tcttgttcct aatccagaag aaaagtttga
41041 atcttttacc attgagtgta agtttacctg tggatttttc atatatggcc tttattatgt
41101 tattttcctt ctattcctag tttgctgagt gtttttcgtga taaaaggtgt taaattttgt
41161 taaacatttt ttctacatca atataaatga tcatgctgtt ttgtccttta ttctattact
41221 atagtgtatt acattgattt ttgcatgttg tattattctt tttttttgag atgaaatctc
41281 attctgtcat tctggctgga gtgcagtggc atgacctcag ctcactgcaa catttgcctc
41341 ctgggttcaa gggattctcc tgtctcagcc tcccaaagtg ctgggattac aggcatgagc
41401 cagcacaccc tgccacatgt tctatcattc ttgcattcca ggaataaagc caacctgatc
41461 atcacaaata ttggtctgta gttttctttt catgtaatgc ctttgtttga ctttgaaatc
41521 agggtaatac tggcctcata taatgagctt tgaagtgttt tttatattca tttttgtaaa
41581 tgactttgag aaacattggt tctaattctt ccttaaatgt ttggtagtca tccggttctg
41641 ggctgttgtt tgtttggagg tttttgaacc agtttaatct ccttcgtagt tataagtctg
41701 ttcgtttttt ctacttcttc atgattcact cttattaggt tgtatatttc tagaaattta
41761 tgcacttcta aattatccaa tttgttgaca tataattaac tgttgatggt attttcttat
41821 aatcctttg atttctatgg catgggttct aatgttctct tttttatttc tgatttatta
41881 gttgaatctt ttttccttag ttaatctagc taagcatttg ttaatttgt tggtgttttc
41941 aaaaaccacc tcttagtttt gttgattttt ttctattgtt tttatattct atatttcatt
42001 tatctctgat ttaatctaat ctttaggatt ttcctccttc tgctagcttt gggtgtagtt
42061 ttttttctct cctagtttcc tgaggtataa agttaggttg ttgatttgca aactttcttc
42121 tacttctttt tttttttttc ttaagttgtg gagatggggt cttgctttgt tgcccaggct
42181 ggtctcaaat tcctggcctc cagaagttct cctccctcag cctgtcaaag tgctgggatt
42241 gcaggcatga cccaccatgc ctagccactt tcttcctttt ataatgcaca tatttatagc
42301 tataaaattc tctgttagca ctgcttctgc tgcatcttac acattttggt acattgtatt
42361 tttatttcc tttatctcaa gatattttct aacttcctt gtgatttctt ttttgaccca
42421 ttgcttgttg aaaactgtgt tgtttaattt tcacatattt gtgaattttt tgttttcctt
42481 ctgctactga tgtctagttt tatgtcattt tcatcaaaat agatattttg tataatttca
42541 atctttaaa atttgttaca agttttttttg tggtataaca tgtgatttat ctttgggaat
42601 attccatgta aacttgagaa aaatactatt ctgatttat tgggtggaat gttctgcaca
42661 tgtttgttag cactatttat agtgttgttc aagtactgta tttccttatc gattttctgt
42721 cttgttgttc tagccattat tgtaagtgag gaattgaagt cgcctaccat tattatgctg
42781 tttatgtttc ctctctgatc tgtcaatgtt tgcttcagat atttaggagc tctggtatta
42841 gaggtatata tatttgtaat tgttatatct ttctgctgaa ttgacttttt gttatataat
```

FIGURE 2 (cont.'d)

```
42901 atccattttt ttgtcttgtg actatttttg actttaagtc tattttgttg gatagtagta
42961 tagtcacttc tgcttgcttt tatttaccat ttgcatggca tttacttttc cttttttca
43021 ttttaagcat atttgtttct tagacctaaa tgacaggata aagttggatc cttttttacaa
43081 atccattttc cagtctatat cttttgattc aggagtttaa tccatttaca tttaaagtaa
43141 ttactgatag ggaaggacct acacttgcca ttttgttgtt tcctgtatgt tttgtaaatt
43201 ttgtttttta ttccttctct tactgacctc ttttgggttt tgtcgatttt tttttgtggt
43261 gacattttga ttcccttcct gtttcctttt gtgtgtattc tatagatttt tttatggtta
43321 ccataagaat tataaaaaac atcttaaagt gttaacaagc tattttaaac tgttaagaga
43381 ataacttcga ctgtgtacaa aaactatttc ttcaaagctc ctaccctcac cttaggttac
43441 ttatgtcaca agttacatct tcatatgtaa tgtattcatt aacacagttt tatagttatt
43501 tttaagcttt tgtcttgtaa attctataca agaattaaaa gtgcatttat gtaccaaaac
43561 tgcatagtac agtctctata tatgtccata tatttatctt tactggagag ctttatattt
43621 tcataagact tcatgttact atttagcatc cttttgtttc aacttgcaag atactacagc
43681 aggtccagtg gtaatgaact ccccagtttt tgttcatcct ggaaaggctg atttttcctt
43741 tatgtttgaa ggatggtttt gctggatata atattttgg ttgaaatttt ctttttcttc
43801 agctctttga atatatattc cccctgcctt ctggcctgca aggtttctgt tgataaatcc
43861 actgataatt ttataaaggc ttccttttac atgacaagtt actttctttt gctgctttca
43921 agattgtctc tttgtctttg acttttgaga gtttgattat agtgtgtctc actgtgagtc
43981 tctgggtttt ctttaacatt tttttttttgt tcatatcttc tgatgatgaa ttcctttaac
44041 ttttatattt gtgaaatgtt ttttcttcat tttcagaagg tattttttagt gagtgtaaaa
44101 ttctacattg acagtttttt tctttcagta ctgtttagtg tttctctact gtcttcttgc
44161 ttgtactgat tgtatagaaa ctctgctgta attcttatct ttgtgtcttt gtacttaatg
44221 tgccttttta ctctgcctgt ttttaagatt ttattttat tattgatttt gatcatgtgg
44281 cttggtgtga gtttcttcat atttattgtg cttggggttc attgagctta ttaagtctgt
44341 aggtttatat ttttcattac atttagaaaa attgtagcca ttattcattc aaatttttt
44401 ctgttcttct cccatttctc atgcccttat ggggtctaat tatatgtata ttaggctatt
44461 tgaggttgtc ttacagctca cttacagttc ttatgtttat ttttccactt ctatttcatt
44521 tgggcaggtt tattatactt ttccctaatt tgctaatttt tttgcaatgt ctaatccact
44581 gttaatctca tccaatgtat tattaatttc agacattgta gttttcatct ctagaaattg
44641 ttcatctttt tatatcttct ttgtctctat ttgatatgct aagtcttttc tctagcttct
44701 tgagcatatg aaatatagtt atgacaacta tttttatttta ttacaacttt taccttaggt
44761 tcagaggtac atgtgcaggt ttgttatgta ggtaaactcg tgtcacagga gtttgtttat
44821 tatttcatca ctcaggtact aagcctagta cccaatagtt gtttttctgt tcctctccct
44881 tctcctaccc tccaacttca agtaggcccc agtgtttatt gttcctctct ttgtatcact
44941 actattttaa tgtctctact agttctctta tttttgtcat ttctgagttg attttatttt
45001 tctcactatg gccatattct cctacttctt tgaatatctg gtatgcaaat tataacctagt
45061 atggatatta tatcaagacc ctgtcgcaat atggatacct aaaagaaaat aacaatgttt
45121 accagtttgc tctaagcctt tcttagctct tttgcttgtt tctcaagaac aagcacagag
45181 ggtggagctc aaccaagact gaagttaaag atgtagaaag attgagatgg gaagtaatta
45241 agttgaggag ctctgataca atggtatttc tcttttaat catgtaagat gcaagcccaa
45301 gataatatgt tgggaaagtt gaaggcgaat gtcttgagaa atatgaaatg cacccaaggc
45361 tatggctggg tgatagaaat aactaaaaag ttttaaaagg attgttttat agctggtcct
45421 tgctgaggtt aggggatagg cctggaaaaa ttgagcagtg gtattgccca ggcaggactc
45481 ctcatgacat tctccagatc cctaagtttt tccaagtttc caagcatttc cttggccagc
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45601 gcattttct ccatcaaatg ggaacttttg gggttctgca taatttttca gggttccacc
45661 actttgact ctttctggat accttgtaag gatattataa ctctttaatt catgtccttg
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45841 tcagttctcg ggagtaacat atacaattca ttcttacttc cagtctttta ttcctaagtt
45901 ccttatctct agttctcttg catatttgtg gcaattatta gtttttttcc aaaaatccat
45961 tctccctttt tcctgtacat gtatctttcc agcttgacca catttcccag cttccctggc
46021 agctaggtga agcaatgtaa ctaaactttt gcctgtaaaa tatgagcaga agttatgtgc
46081 acaatatctg cctcacttgc ttaaaataaa ttgtattatt tgagctttct atattgtccc
46141 ttttacaac taaaatgtag aggttatggc aacttttatg gtaaagagaa tcatcacgta
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FIGURE 2 (cont.'d)

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46201 ggagatcaag aatcattgat ttgagaggaa cctaaatcct ttaatgactt agtggagcaa
46261 gactgcccca tcagtctgga agctacccca caacttatgt atatcttcag attgttgagc
46321 aaaagagaaa aaatgaagcc actatatatt taggtctctt catgttaaca gtttagcttt
46381 taacctaaca cacatttatt cctgaatggt agcatattat taacatcaca ggaagggaat
46441 tccttgttca tggatctttt attttgttga aataaaggta atctgcttgg gcttaatact
46501 gccaaggcag aattttttgg aataattatt tctatagatg acccattcat aatgacaact
46561 aacatggttt ctaaaatgga ttcatgtacg tcatcttatt tagtccccgc aaaaattctg
46621 aaggtaggta taattattcc cattctatat attgaaaaat tgggattcag agagactacg
46681 gacttataca agtttctgca gctatttaag aaacagagta aagtctcaaa gccattaatg
46741 aactgtttag tttagtgctg cttagtaaaa ttagaactgt ttgaagtgcg ttttaatagt
46801 aaacccatcg atatttagtc agctctctgc ttgctaacta atatggaaga aaaaacatac
46861 atctacgtac atcctgaatt gggagaaggg aaataaaata ttgccaatcc cctttcctgt
46921 attaggtact gtgataaggc gataaggctt ttcattatta taaatgagtc ctggagaggt
46981 taagcgcagt cacccaaagt cacatgacca gtaactttca gagattttac cccaggtctg
47041 gaaagactct gaagcccatg ttattgcctc cagagcctgg tggagaaccc ctgaatggga
47101 cagagactca gcagacagag tggtcctttc cttccaggga gtcagggaag gtttggtagg
47161 ggagatagag ttagatctgg gtgggatttg gatgaaatga gatcaagcag ggataaataa
47221 gatccaagct gtttatgagg gacagggaga ggccagctct gttagaaaga gtggtttata
47281 cagagaagca tggaaacatt tgctccatgc ctcgccttcc atggatagca gtccagaaat
47341 gctacttgcc tgcctgacag tctttctcca gtccccaggt gtggacacgt tctgagcacc
47401 tgagcctggg tctgccctga cccagattct gtgagctggg acagagaatg tgtcctgctg
47461 tccctcctcc cccacttggg cccacaccct tttctacaca tttggattag aaatctgaat
47521 tggcctttct gtgaacccca atgacaggca agtccccagt aaagaagcac ttaatttaat
47581 tgctccttca gggtccactt agagtaatag ttgtgaacag ctctccctag tgtctcccac
47641 aggcagtgac aaatgttgct aaagataagt cacaaattct tggcaaggcc atcttaaata
47701 tgggaaggaa accttgttca gtcctgaaca gtcctgttca gactgatctt atcacaggtt
47761 gcacactgcc tcaatgtcac catgtttcta ccctcagttg tgcttggcag agagaggaca
47821 gctatacata aagtctgttc actctacaaa ggtgaaatca ttttttttaa ggtaattatg
47881 attgttctga ggatggtgat tgagtgacat ttaaaaaatg ggaaaagttc tactcataac
47941 tctgtctgct taatttgctt atataaaaga cttaatggtt tttgttgagt tgatccagag
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48061 gggatgccaa atgtggctga gagtttaggg tttacattcc acaccccagc cttaaatacg
48121 tttgtataaa ttattggttg attttttctt ttcatggctt ttctttgaca tttgatgggg
48181 ctggatttat ggaggcaacc aacaaattac acagcaatga attctggact gtagtcccac
48241 agccttgagc ctagatacta gctgtgtcac taatactctg tgtgaccagg gtaagttatt
48301 tagatacatt tatgactttc caaatcaata ggttggacaa agttatcttc aaaatgtctt
48361 tcagatttga ccctgaacat atgcgattct ggcatgttct gatttttagt tttctgttct
48421 tgaagcatgt ctacaataga aatgcctacc ttcatataca ataaaaggac attagattaa
48481 tatggtgtct gtgaaaatca ttgaacagct ttagagataa aaataatgaa atgagtcaag
48541 ttctccatta ttaattaaat cttttaaatt ttctgtttat gaaactatga acaataaatt
48601 ggaacaaaga tataatctca ctacaagtaa attgtatttt atgtaaaata taatttgtct
48661 ttagaaaata ctcaatgaaa ttaccttttt aatttcagag attttgagga ctattattgt
48721 tatttcttta aagtgataaa tgtaatccaa gatgcctttt ttccccccttc agaagcttga
48781 gtgcccaagg gtttgataaa tgtggaaaat aaccgctgtt cgaatatcct gttggcctgc
48841 tggtgagatg tcatcgtgtt gtctgaatgc agtatgtgtt taaacttgcc atttattacc
48901 tgaaattgtg ttattttgcc tcataccctt agtaatactc ttgtaatgct ggctgagaat
48961 tgaagcaaat gccctatgaa actcaaggga gcaaggtctt tgttattttt cagaagaaat
49021 gactggctga ggctgtaaag aaatcttgtg gtcattctca tggaaagagg attggagccc
49081 cgattctttg atctcattat tgaccagttg attgagaaga ctgtcctcct gtccccaccc
49141 aatcacaata agtgggtaat tacctgaggg ctaatttgct ccttgaatgt gaatacattt
49201 gtggaaattt ccttgtgctc agcacctgtt caaaacatcc atttgtattg cagagctatt
49261 gtttttctaa tctcattgtg gagctaagag agagattgtg tttaaggttt ccttcgtaat
49321 aggttttctt gctccaggaa ggatgcgtga cagactctgc acactgctgc ttggtaggtg
49381 ttcagtgatg gatgcgtttt ccatctccca ggtacagctg cagctgtgct gactctggtg
49441 cgtttgtaat atgcactgtg gagtgcacca tgatttcatg atggctggag aaatctggtg
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FIGURE 2 (cont.'d)

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49501 gctagaattc tagggaggag gacatgagtc ggaagtgcag aaacctcaca ctgggacatt
49561 gatggagaaa atccaattct gtccctggag ttaaagagga gtcactcact gggccatcat
49621 aagagcaaat aaagttacag ttatttcttc agatccacaa ctcaaactca gcgaaagtaa
49681 ttattcactc ttttgtccc aaacaataat gaaatcagct aaagcatatt gtatttatta
49741 cttccactca agttattgag ctgttctgac accttgttgc tgggaagata cacagatgga
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49861 gtcatagggsa ttttatgctt gcctattcaa aaaacagttt ttaccttatt aaaaggtgat
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50281 ttgtattttt agtagagacg gggtttcacc gtgttagcca ggaaggtctc gatctcctga
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50581 ctacacactg cctgctaggc aggggctgg gtgccaagaa gggatgtcca gagataaacg
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50761 cccaggaag ggatgctcag aaagaggggg ctgattatgt ccctggttca tgagaaaaag
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50881 catcagccag tctgtgagtg caggggcatgg ctggagttct ggctttaaga tgagtgggaa
50941 gaaaggctgg agaggaggtg gatccaggaa aagttgctgg gagcatttat tcttttggca
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51181 aaacatgctt ttacatttta tttttatttt aaattttttca ctatcctcaa tatcagtgga
51241 aacaaatctg cttttttaat ttttttttta aaaatgagat cctattgtac acattatttt
51301 aaattttttt tcattctttc ctttttttaa aattaaaaca attttttttg agacagtctc
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51421 caggttcaag cgattctcct gcctcagcct tccaagtagc tgggattaca gacatccacc
51481 accaccgtgt caggttaatt tttgtatttt tagtagagaa tggggtttca ccattttgga
51541 caggctggtc ttgaattccg cggatccttc tatagtgtca cctaaatgtc gacggccagg
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51661 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nagcgtattc gcccgtggtg
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51781 tgggcgaccc agccaggtct gcggagcggt gcccggcggc aaccccctca cggacgctgg
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52081 cttcatggcc ctctgcacca tctgcacgtg cccaccgccc cctgtggcgt tggcctggag
52141 tgggaggtag agtgccctga gcgggtggct cctcccacag ctgtccagac ccatccctga
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52261 gagatggggg agggatgttt aacgcagaga atgacaaggg cagccgggtg gagaggtgct
52321 agggaggagc ctcccgccca atccaatgca agggactgaa ccgtggggct gcagagtaca
52381 agagggaagg gtgcgctccc agccacagga gggcagcagg cgtgggcagg tgtgtggggg
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52561 tgtgtgctca ggtgagggct ggagagaccc acaaggaggg atcctggtcc tgatcccgat
52621 cccggcttct gagtgatgca gacacactca caagctcact ggcacatatg tgtgtccacg
52681 tgcacacaca cacatgcaaa tacacccagg gggctgggct gtcggtgcca cagaggtttt
52741 gaagaaggac ttgggtgctg gggtgccaga gattggtcca cggtgggcat tcagcccaag
```

FIGURE 2 (cont.'d)

```
52801 caggaccaac cagagctgcc ccccagcact ttctgtttag atgcggctgg gagataatgg
52861 ccacatgaga acctgaggtg gagctactat gatgagctcc tgtgccctct cccatggggg
52921 cctgtctgca gcaggagagt gtgatgccaa cacaggtgaa agagacagaa agagggagcc
52981 agtgtgcatg caccctgggg cattgcttga gtccctggat ccatttctgg ctgaggcccc
53041 cgaccctcta ttgtgtccag gtatttgaga taaggcatgt cttgtccagc tgcagctggt
53101 ttgagttggg ttttgtcatt tgcagcccaa acagtgtctc aacttcagtg gtcatctggc
53161 ctggtcacta atgggctggg gaaaggagga aggttggggc aagggcccat gtgagagtcc
53221 aagcttggta aggctacaga gggctcaaaa cgaggtgggg tgctacctga gggatgcgag
53281 ggctgggcag ggcctggagt ccccgatgca ggagacagtg ggttgggagg gttgggaccc
53341 gggaagcaga gtgctgggga ggtccaggtc agggtggcag gggtgtggca gattaagagg
53401 cagacacagg ttcctggtgc gtaggaggtc agggggccat aaggagtgtg ttccagaggg
53461 gggtctacac ccaggtccca gaggctggga gaggggaggg gtgggaggag gggaccagga
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53821 accagcagct gggggagggga gaggaggagg cctcagaggg ggcccagtca ggtgacctgg
53881 tgcctcaggg acccgcagct cccccaccca ggcctgccct ataggatgat gctgggcgca
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54661 cccagatttt ggccaaaagc cagtcgtatt ttgcatccga agggaggaaa atagggttct
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54841 tttctttaac agtgactttg gaatcagaag agcctggagg gggtaaaggg ccctgcggtg
54901 gtatttcctg tcccagccat attacttaca acctgcatga ctctggatga cacactgggc
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55681 ttacatgaag acatggggta ttggaggggt tgacagaaag aatgaggtgg gtggcagggc
55741 tgcagccaag agcggccagg aaggggcatg gccagacttt aggtgctggg aaagaccagt
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55861 gtcacttgct ataagtattg tggaaggtgg ggtccttggg cgtctctccc tcgaaaacag
55921 tgctgtccaa tagacatata atgctacccc acacatggaa ttgtatatat tcaggaagcc
55981 atattaataa aaataaaagg aaacaggtga aatgccggtg aataatataa ttttattta
56041 cccaatatat ccagaatatt atcacttcaa catgaaacca atctaaaact attaaatgag
```

FIGURE 2 (cont.'d)

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56221  gtggctccac  cctggtcaga  gagaccccag  aagcctcagc  actccctgag  gaccaaggag
56281  gggggaggga  ggagggagag  cagagtgtga  cttgcacatt  aggcgtgcct  gtctgtttat
56341  acttgagatt  agttggctgc  ttttaaatac  cagacagttt  cacataaaaa  tttgaatgac
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56461  cgctcttgtc  ccttttacag  agtcccagct  ctcagggtcc  ccactgccac  acccgtttgc
56521  atgagatgcc  tgggccactg  atacctgatc  tgtgccctag  aatgctgggc  tgcctggcat
56581  gctctgagac  actttctgac  atgtccccac  atgctctgac  atgttcctga  tggctctggg
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57601  gacatagaat  gtactcattc  ccttatatct  aacagctaca  tatgataggg  cttaacaaaa
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58981  tgagagaaaa  tatttgcaac  tatgcatcca  caaacgacta  atacccagaa  tctatgagga
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59101  aagaagacat  acaagtggcc  aacaaacata  tgaaaaaatg  cccaacatca  ctaatcatca
59161  gagaaatgca  aattaaaacc  acaaagggat  accagtcaga  atggctatta  ttaaaaagta
59221  aaaaatgac  agatgttggc  aggatgcaga  caaaagggaa  tgcttacaca  ctgttggtgg
59281  cagtgtaaat  tacttccatc  cctgtggaaa  gcagtttgga  gattttgcaa  agaactgcaa
59341  atagaattac  cagttgaccc  aacaaccca  ttactgtgta  cctacccaaa  ggaaaagaaa
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FIGURE 2 (cont.'d)

```
59401 ttgttttacc aaaaggacat aggcacacat atgtttattg cagcactgtt cacaatatca
59461 aaatcatgta atcaacctag gtgcccatca atagtggcac cagataaaga aaatgtgata
59521 catgtactcc aaggaatact acatagccat aaaaaagaat gaaatcgtgt tctttgcagc
59581 aacatggatg cagcttagga ttggcactta agccataatc ttaagtgaat taacccagaa
59641 acagaaaatc gaatactgca tgttcttatt tataagtggg agctaagcat tgtgtacaca
59701 tgggcataaa agtgggaaca aaagacactg gggactccag gaaggggagg gagggaggaa
59761 agggttgaaa aactgggtat tgggtactat gctcagtatt tgagtgatgg gttcaataga
59821 agcctaaccc cagcattatg caatataacc atgtaacaaa cctgcacatg tacctgaatc
59881 taaaatttta tatattaaaa aaaaaaaaac tgttctgacc agtaaaaaaa gagctgaatg
59941 aggatgggcc cagtgctctg cctatttcag cccatcactc tcccttctgc ttctcttcac
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60061 gccttcccca acccatcctt cacatcctcc cactcctgtc caggattttg gcctgccatg
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60301 ccaaattctg gggagcctcc tttcataggt ctttgcatgt gtgcacattt atctgtccaa
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60541 ccttagcagt ttgaaggagc tatttgtata cgacagatat gtatccttta tcggtccctt
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61021 gcactgtagc cccccagccc cgcaacaggg catggaaatg aaggaaaatc ccgagttcct
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61201 ccctctggaa actaaagaga acccctgaac atgtgtctct gagttgtttt tcagaaaccc
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62521 atgagattta tttttgtaaa tggcatgaca gagcagtcca atttaatttt cttctcatgc
62581 aaaggcagtg tgatagcatc attaaaataa tatccctttt tcactgagtt gaaaaacctc
62641 cattgtgata cactgaattc ctctgtgggg gagtccattt ctggatctta ctctatactg
```

FIGURE 2 (cont.'d)

```
62701 tcccccaatt ctctctgttt tcaagcacag tgtctgctta acagtaacct tacaaatcca
62761 gcaaggaaag tgttccttct gtgtttttctt ttactttttt tttttttttt aaagataggg
62821 tcttactctg ttgcccagtg tggagtgcag tggagcgacc atggctcact gcagcctcaa
62881 actcctggac tcaagccatc ctcccacctc agcctcctga gcagttggga ttacaggcat
62941 gcgccaccat acctaatttt ttctattaat ttttttttttt tttaagacat gaggtctcac
63001 ttggttgccc tgcctctcta tgtggtttta atttttttca aaaaatttt gactatgcta
63061 gatttctttt tccatatgaa tctttcaatt ttttaattgt tttctctcct ttttagttcc
63121 tcttcaccac caccacaccc ccaccaagaa agataaaaaa ttctggctga aattttactt
63181 ggaagtgcat taagttttta taatagaatt tggtagaact gacattttta cagtttcctc
63241 cccaatatca aatcactgtt aagagttcat tgtatatcct ttaaaataac tttatagttg
63301 gccgggtgcg gtagctcacg cctgtaatgc caacactttg ggaggctgag gcaggcaaat
63361 cacaaggtca ggagttcgag accagcctgg ccaacatggt gaaatgccgt ctctactaaa
63421 aatacaaaaa attagctggg cgtggtggca ggtgcctgta atcccagcta ctcgggaggc
63481 tgaggcagga gaattgcttg aacctgggag gtggaggttg cagtgagccg agatcacgcc
63541 actgcactct agcctgggtg acagtgcgaa actccatctc aaataaataa ataaataaat
63601 aaataaataa ataaatạaat aactttatag tttttcctta tatgggcatt atattttatt
63661 gttagtatgg agaaaggcta ttgatttttt tgagaaatat atttatctaa acactttgcc
63721 aaatgaattt attaatctag tagcttttaa aaaaattaga atctcttgtg ttttctaggt
63781 ctaccatagc attaccagaa aagatcatct tccctgttct ttgacaatat gtttattgat
63841 tgttttcctg ttttatcatg tggtatgacc tctaaaataa tgttgaataa aaacagtgat
63901 atcagcattc ttattatttt aatggaaatg gcattagagt tgcacctttt tgatgttagc
63961 tatctttatc atataaagta aggttcctcc tattaatttt tattagttgt ggctattaaa
64021 tgttattaaa ttccctttta gtgtgaattg atataatcat aaactttatc cttatgggta
64081 taataaatta tggtggtagc tctcttgata ttgaaatatc tggaataaac cctgcttggt
64141 tattacatat agtcatttaa tacactgctg cactcacttc gctaatatca cctttagttt
64201 tcttttaaat ctttatttaa tacttggatt ggtcttcagc cttcttttga agcctgcctg
64261 tatccagttt cagaactaag cttacaccag ctttatatga tcaatttggg gctgataaag
64321 agccctggaa atgtcagctg tctagtggct gggtgagact cagctgctcg ctgtgtaggt
64381 ctgtttccaa tcactatatg gaaattggcc tattttctac aatttcttct aatttatctt
64441 ttcctaggtt tttatccatt tctctaattt ttcaaatttt tgccatatta ctctcattta
64501 aaaaatatgt aatcataatt actgttcttt tttttttta agagacgggg tcttgatatg
64561 ttgctcaggc tagactgctg tggctattca caggtgtgat catagcacac tacagcctca
64621 agtgagcctc ctgcctcagc ctctcaagta gctgggacta cagttgtgta ccaccatggt
64681 gcctggctat aattactctt tttatgattc cttttttatt ccgaatcttg catttttttt
64741 ttctatctct tttttttccat cagcctcatg aggaggttat tattattatt ttttggacct
64801 ttcaaagaac cagatcttgg atttactatc ctctggcttt catttgcttg agtctttata
64861 gtttgcaaag tttccatttt cagaagaaga aagagaccca ggaacattct gtggcttgct
64921 caaggtccca cagcctgcta gcaagtggct gaactggaat ttaagctagg cccctgactc
64981 caggctgctc caagagatct ctgagccaag cttttgaagg caccatcagt ggtgcctggg
65041 atctccgggg atctcccagc aatttttgtct tcttttaggt cacctgtccc tttacctgct
65101 gcttcagttt cttaggcaca gggcttctct ctggtaacag acaggaagct cctctgaggc
65161 tacgtgcccc tgggagactg tggggaggct ggaatctaga gtcagatgac ctggcttgaa
65221 tcctagctct gtggctggct gtgggcacct gtgtctcagt tttcttatct gggtaaaatg
65281 atcaacatca atagagccca ctacctagga tggttgtggt gatgattaca caaataaaga
65341 taggttatct aaaaccccag tggtcaaatg tgcttcagaa tccagaattt ttaggatttt
65401 agcagtgggt atacttcatt atgtgccata ccccctccca ccccagtct agggcaacat
65461 actattttac aatcgaacag agcagtattt ctgcagtgat ccacatacat atcacattga
65521 atggaaaaag cctctaaata acctcaccta ttgcttcaaa gaaggtttgt ttacaaacaa
65581 tgaatttgct gcacagtttt gaaatatgca gcagttttca gatttttag atttagaatc
65641 gagggtaagg gattgcggac tgtgcaggtt aacccatagg atagccttgg catgtggctg
65701 gtgcctgacc tatccagctg ctattgtgtc cacagctccc aaggtccagt tcatggacat
65761 tatttgctga atgctcatct gccagtctcc cacggtgtcc tctgcgcagt tcctccctac
65821 tcccagggac ctatgcccag tccagtcctg gccttggccc ctgctgtctg cacaccagct
65881 cccagcctgg cagcaggctg gtgccaggaa caggggggaga caaagccctg tgcccgcctg
65941 cctttcctcc agggtctccc tcttcctcct gcctcatctc cggtggacat aagaactcac
```

FIGURE 2 (cont.'d)

```
66001  atcatcatca  aaggtggcat  accaggactg  gcctggttcc  tgaccccaga  acccatggtg
66061  cccctcagtg  gtcttggtct  ccagcttagt  ccacagcttc  acctgcctgg  cccctggcag
66121  caccttgact  gggggccctt  ggtcagggtg  ctggggtgga  gagtgcagaa  tatgatccca
66181  gggcaggtcc  tccacagtgt  gcctcgactg  gccaggggct  tctcaagtgt  gccttgggga
66241  gtagaaccct  ctccgcccct  atggacagcc  cacctcaggg  cctgcaggaa  gccctagtgt
66301  cttttcaagac  atagcttcct  cagctggagt  gtgaatggag  ccacccagga  gccctggatc
66361  gcagaggact  gagctgctca  gaaaggtgtg  cccccagca  gcctacctgg  atggcaatgg
66421  ggacaatctt  gttggccagg  ttcttataca  gcaagcagat  gggagcggcc  aggaactgga
66481  gtgtgcaggg  gtctgttttg  ttggcatcga  tgccatccag  cagctcaaag  tccacgatga
66541  aaatgttccc  ttgctgcagg  aggcagagag  atgtgtccaa  atcaggctca  gcagacggac
66601  caaaaatcag  gcctggggaa  agagtgatga  cctctgggca  ccctctccc  tttcctgcga
66661  ctcagcggag  ctcagaatgt  gtacttctct  cctctgactc  caaggctgat  tgattcacat
66721  ggaaggtgtt  cacaggttgt  ggcagttcgg  ggtaagatga  aggaatggca  gcagctcatt
66781  cggcatttgt  ggtgtctgaa  acctgcttga  ctggcacgaa  agatgagaga  ccgacccgag
66841  tgtcagttta  ctaagaagaa  agaggttagg  tgaaatagat  gtgacgagtt  aaatgccaat
66901  cttcaccacg  gggctgaagg  tccgnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
66961  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
67021  nnnngggggtc  ctcagggact  gggcctcagc  ccgccggtgg  ttccaccctta  ggcttcccca
67081  agtcggtcaa  gagccgggag  cagctgtcgg  agtacctgac  cgtggtgatc  ttcaccgcct
67141  ccgcccagca  cgccgcggtc  aacttcggcc  aggtaggcag  ggccgggccc  gctgggcagg
67201  gctcccttct  caaggccgct  gcctcctccc  ccgccccggt  tctgcacgcg  tactgcaccc
67261  tcggacagcc  tcggggcctg  gcacgggact  tgcaggatgg  attctgcccg  ctcagccaag
67321  ggcgctggcc  gcggggaaag  aggatggacg  gactgcaggg  cccgctggag  ttgggggggca
67381  cggggaggac  ggggcccagg  gggcagctgg  gcagcagggc  ttcgggggtg  cccacgcttg
67441  ctggcggtcg  tctccgcagt  acgactggtg  ctcctggatc  cccaatgcgc  ccccaaccat
67501  gcgagccccg  ccaccgactg  ccaaggccgt  ggtgaccatt  gagcagatcg  tggacacgct
67561  gcccgaccgc  ggccgctcct  gctggcatct  gggtgcagtg  tgggcgctga  gccagttcca
67621  ggaaaacgag  gtgaagctgg  gcagggcggg  gcacagcccc  aggtcacccc  aggttaagcg
67681  gttcctcagc  ctcagggctt  tgtgactcgg  gccccaaggc  tcacttggag  caaaggaatc
67741  ctgacttcca  aggctggaag  ggcccagaag  gctgcagccg  ccaccaggtc  ccccggcctc
67801  agcctggaca  gagctcaggg  tgtgcagggc  aggagagcac  acagcccagg  ctttgctcac
67861  tgtcaccaga  gggtcgtgtg  tgacgccccc  tccccccagc  tattgacaaa  gttcttgcac
67921  atgtgtttta  ccctggtact  ccagagggaa  tgaccaagag  tttcctgggt  tccttccgga
67981  cacgtgcatc  tcatttaacc  taacaactga  atccggtgtg  tcttcgtgga  tgcacccgct
68041  ttggggtagc  tcagtactgc  atagaatggc  cggaccagtc  caacctgctc  cagactgctg
68101  ggtgtctgag  ttgttcccgg  ccaatgtgtt  ggtccctcac  tggacatcct  tgttttttgtg
68161  gctttgcaca  tgtgttcagt  atgaccgcac  acattcctag  cagacaaatt  ccttggtcaa
68221  agaatattga  tactgaattg  ccctccacaa  actaaattca  aaatcccatt  atcaatagcc
68281  tatgtttctt  ggacctttcc  agctcagaag  ctttgtgatc  ttaatccaat  acagtatttt
68341  tttaaaatga  tatctagctc  tgccccgcag  acatctgtgt  gagaatgcaa  ataagcacag
68401  gaccccaaca  gggcagccac  cccttcaggc  tccctggccc  gctttctgcc  ttcctgggct
68461  ggagaggcca  gtgctggccc  cagcgcccct  gatgggaggt  gagagtgctg  cgcagggggtg
68521  gcccaagaca  gcaggatacc  atggctgcaa  acaccagcag  ccccagctt  catctgcatc
68581  atctcgtaac  cacttggcag  caggcagtta  ttttcccact  tatccatgaa  gccccagccc
68641  tggagccttc  cttagagaag  caggttggag  gcgacgacac  ttgccttccc  gaggccctct
68701  tgtcaggcag  cagagggtga  atatggggag  gtgaatagat  gctccctcct  tcatctccca
68761  aacggtggct  ggccccttgg  gatgagacag  gcctgtcagt  ttacacgggt  agtggattga
68821  cctatgtgtg  tgtccatgtc  tgggccctca  gctgttcctg  ggcatgtacc  cagaagagca
68881  ttttatcgag  aagcctgtga  aggaagccat  ggcccgattc  cgcaagaacc  tcgaggccat
68941  tgtcagcgtg  attgctgagc  gcaacaagaa  gaagcagctg  ccatattact  acttgtcccc
69001  agaccggatt  ccgaacagtg  tggccatctg  agcacactgc  cagtctcact  gtgggaaggc
69061  cagctgcccc  agccagatgg  actccagcct  gcctggcagg  ctgtctggcc  aggcctcttg
69121  gcagtcacat  ctcttcctcc  gaggccagta  cctttccatt  tattctttga  tcttcaggga
69181  actgcataga  ttgatcaaag  tgtaaacacc  ataggaccc  attctacaca  gagcaggact
69241  gcacagcgtc  ctgtccacac  ccagctcagc  atttccacac  caagcagcaa  cagcaaatca
```

FIGURE 2 (cont.'d)

```
69301 cgaccactga tagatgtcta ttcttgttgg agacatggga tgattatttt ctgttctatt
69361 tgtgcttagt ccaattcctt gcacatagta ggtacccaat tcaattacta ttgaatgaat
69421 taagaattgg ttgccataaa aataaatcag ttcatttaaa atgggtcttg ttccatgtgt
69481 tatattccaa tcaccccaaa cagctcactg ccatctccca caccaagaga aaaaaaaagc
69541 catagtcacc gtgattttat caaggcaaaa gcctccccac ccaagtctgg atagaaggtg
69601 cttttttcct caagcagtgt ctactctctt tggaacacat cccaaatgtc accacctctg
69661 ggaaggcatc cttggttcct gtctctaccc tggatttgtc agaacctctg ttcttgcccc
69721 ctctgtggtc tctcccttgg gacaggagcc cctggaagga cagaaacccc actttatttta
69781 tgtctgtgcc ccagggctgg cataaggcac cagcactcag ctgttctctc cttttcctcc
69841 tggaagggca cctagctaat ggatattagg cattgtcttg ggagctgggg gcttattttt
69901 tcctgaggca gggttcttaa catgacataa aaaataaaaa tgggcagggc gcggtggctc
69961 acgcctgtaa tcccagcatt ttgggaggcc aaggtgggag gatcatttga ggtcagaatt
70021 caagaccagc ctggccaaca cggtgaaacc ccatctctac tgaaaataca aaaattagcc
70081 aggcatggta gcaggtacct gtaatcccag ctactcagga ggctgaggca ggaaaattgc
70141 atgaacctgg gagacagagg ttgcagagag tggatatcgc accactgcac tccagcctgg
70201 gcaatagagc gagactctgt ctcaaatagt taataaataa ataaattaaa ttaaataaaa
70261 acgcattctc tttccccagc cccaagtagc agagcccgct ctgagcctgg gcatggtgac
70321 ccattctcct cgtgctcaca tgcccaactc ccagccctcc agccctggc ttcggaatca
70381 tgtcatcagg gtctcccatg tctctggaag gtgcttccag tgtggcaggc catcagctca
70441 gtgtctgggt aaaggcttct acagggccag catggcatag ggggaggtg tgcatgcgtt
70501 cctgaagcca caaggtcttc tgaggagacc tgactattgg ggtggggact agagactgag
70561 gtccagcccc ttaatgcccc agactccctg ccatccctcg gagaatttcc caccacactt
70621 atgaatgatc ttcgggacag gtgacataaa catacagcta tggtagaggc attcagctcc
70681 atgccactgt gagaatgaac ataccaactt ttaggcaaca aggccatgtg gtcaaggaga
70741 gaggagaaac gaataggagt aggcaggggt ggtgaagcag gtctgacatt ggcaaaagtg
70801 acagagaagg attgggttgg aagggcttca gatggcagag aacctctgaa aaagtctcat
70861 gccagctaat gaagagtcct caaagtcacc atcacagaaa tcttacatct ggcagaaatg
70921 acagcaatag tttggcatga accccacagt ggatccaaac gtgtggcagc tgagatcgtc
70981 agttaattat gttctctgca gctggtcctt ctggttccct ggagctgggt atctgagtag
71041 cacagctcca ctgctaccac aggagaggga gaatcccaaa ttctgtgcat agactgtcta
71101 aacctctgga tgacccctaa gacacatgta cataaggcaa actgcaaaca gcccaattta
71161 ggataaaaca gcctgtctta ctctgtttgt gctgctataa taaaatacct cagactgggt
71221 catttatata gaacagaaat tgattcctca cagttctgga ggctggaagt ctaagaggag
71281 gcactggcag tttcagtgtc tggtaaggga gggatcagtg tctgctccca agaggatgcc
71341 ctctgtgctg tgtcctcacc cagcagaaga gcaaaaaagg gcgaacattc tcaaaagcct
71401 cttttataag gacatcaatc cattcatgag ggcagaaccc tcaagaatta atcatttctc
71461 aaaaggcccc tcctcctaat gccatcacct tggggtttaa gttccaacac atgattttg
71521 gaaggacaca tacattcaaa tcattgcaca accaaagtga tatttgaact ttcaaatagt
71581 ttgcagtttg agatcaacta agttaattgc ttgcttgaat aaaaacatca cagccgggca
71641 cgatggctca cgcctgtaat tccagcactt tgggaagcca aggtgggcag atcacttgag
71701 gtcaggagtt cgaaaccagc ctgaccaaca tggtgaaacc ccatttctac taaaaataca
71761 aaaattagcc aggcggccgg gcgtggtggc tcatgcctgt aatcccagct ctttgggagg
71821 ccgaggcggg tggatcacaa ggtcaggaga ttgagaccat cctggccaac acagtgaaac
71881 cctgtctcta ctaaaaatgc aaaaattagc tgttgagact actcgggaag ctgaggcagg
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72001 tcgtctcaaa aaaaaaaaaa gaaaagaaat tttctggatt aggataatgt tctatatttg
72061 gataaggggtt taggttacct agatagatac atttatcaaa agtcatcaaa tggtacactt
72121 cagatgtacg catgtcactg tatgtaaata ttaccccaaa atcaacaaga accatgagca
72181 aatactgact tctagtgaac gacatgcata ctgaaacttt cgtagtgaag tataattatg
72241 gctgcagttg actctgaaat acataaaaac ctaagttgat gggtgaatac agtgattaat
72301 agatagaaat ctgtggtaaa gcatacggag aaaaatgtta attgtagatt ctagggttta
72361 tatatattct cactatataa ttaaacgttt ttatgtttaa aaatttttat aatgttgaaa
72421 aaccatgaaa tcctacctaa cgcagtaaga caagaaaaag agataaaagg tatatgtact
72481 gggaagtaag aaataaaacc gtctttgtta gcagatgaca tgctcatcta tgtagaaaat
72541 ccaaaagaat ggataaagaa actcctggaa ctaataagtg gttacagtaa ggttgtagga
```

FIGURE 2 (cont.'d)

```
72601  tacaaggtta  atatacaaaa  gtcaatcact  ctcttattca  ccagtaatga  acaagtggaa
72661  attgaaattc  aaaacaaaat  actatttaca  ttaatactcc  aaaaatacat  acttaggttt
72721  aaatctaata  aaatacatac  aagatcttta  tgaggaaaac  tgcaaccctg  atgacagaaa
72781  tcaaagagaa  actaaagaaa  tagacataag  taaatattcc  ccagaaagac  tcaatattgt
72841  caagatgtca  gttcttcaaa  acttgaccta  tagattcaat  gcaatcctaa  tcaaaatctc
72901  agcaagttat  gttgtggata  ctgacaaact  tattcttttt  tttttttttt  tttttttttga
72961  gacggagttt  cgctctgttg  cccaggctgg  agtgcagtgg  cgcgatctcg  actcactgca
73021  agctccgcct  cccgggttca  cgccattctc  ctgcctcagc  ctcccatgta  gctgggacta
73081  caggcacgcg  ccaccatgcc  cggctaattt  ttgtattttt  agtagagacg  gggtttcacc
73141  gtgttagcca  ggatggtctc  gatctcctga  cctcgtgatc  cacccgtctc  ggcctcccaa
73201  agtgctggga  ttacaggcgt  gagccaccgc  gcccggccaa  cttattctaa  aatttagata
73261  gggaagcaaa  agaccagaa   cagctaacac  aacaatatag  taggaaaaca  acaaatttgg
73321  aaaatggata  ctacccaact  ccaagactta  ctataaagct  acagtaatca  agatagtgcc
73381  gtattggtga  aagaatagac  aaatagatca  atggaacaga  atagagagcc  taagaaatag
73441  accttcataa  atacagtcaa  ctcatccttg  acaaagtagc  atagacacta  caatggagca
73501  aagattgtct  tttcaacaag  tggtgcagga  acaactggat  atccacatgc  aaaaacaaac
73561  aaacaagcat  gaatctagat  acagacctta  tgctcttcac  aaaaattaac  tcaaaatgga
73621  ttatagatct  aaatgtaaaa  ttcaaaacta  taaaattccc  ataacatagg  ataaaatcta
73681  gatgacctag  gtatggctat  gacttttttag  acataacacc  aaagccatgg  tccatgaaag
73741  aaataattgg  taagttggac  ttaattaaaa  ttaaaacctt  ccgctctgca  aaagaccaca
73801  ctaggagagg  gaggaaaatat  ttacaaagac  acatctgata  aagaattgtt  acttaaatta
73861  tacaaagcct  tcttaaactt  aacagtaagg  aaacaatctg  attgaaaaat  gggccaaaga
73921  ctttaacaaa  caaaagaaga  tatacaaatg  gcaagtaagt  atgtgaaaag  aagctgcaca
73981  gctgggggggc  gtggtggctc  acgcctttaa  tcccagcact  ttgggaggtc  aaggcgggca
74041  gatcacctga  ggtcaagaga  ccagcctgtc  caacatggaa  aaacctgtct  ctactaaaaa
74101  tataaaatta  gctaggcatg  gtgatgcatg  cctgtcatcc  cagctacttg  ggaagctgag
74161  gcaggagaat  cgcttgaacc  cggaaggtgg  aggttgcagt  gagccaagat  cgcgccattg
74221  cactccagcc  tgggcaacaa  gagtaaaact  ctgtctcaag  aaaaaaaaaa  aaaagctgca
74281  cattctatgt  tatcagggaa  atgcaaattt  agaataacgc  aataacaaga  taccactaca
74341  tacatattag  aatggccaaa  attgagaaca  ctgacagcac  caaatgtgga  ggaggatgtg
74401  gagcaacagg  aactagagag  aatgcaaaat  ggtatagcca  cttaggaaga  cagcttggca
74461  gtttcttaca  aaactaaata  tactcttacc  acacaatcca  gcaatcacac  tccttggtat
74521  ttacttacat  cccaacaaaa  accctcatat  ggatgtctag  agcagctttg  ttcataattg
74581  tcaaaacttg  gaagcaacca  aagatgccct  tcggtaggtg  agtaaataaa  taatatccag
74641  acaatggaaa  taccattcag  tactaaagag  aaatgagcta  tcaagccatg  aaaaggcgtg
74701  gaagaaactg  aagtgtgtat  cactaaaagt  caatctgaaa  agggtgcata  agtttccaaa
74761  gatatgatat  tgcagaaaag  gcaaaactgt  ggagacagta  aaaagattgc  cagggctag
74821  ggcagtggga  gggatgaata  ggcagggcac  agaggatttt  caggcaata   acactactct
74881  gtatgacact  ataatgttgg  atacatggcc  agatccacag  aatgtagaac  accaagagtg
74941  aaccttgaac  tatggacttt  gagtgatgag  gatgagtcag  tgtaggctca  tggattgtaa
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75121  acaaaaaatt  ggacaaaacg  cacaaagcaa  ggaaagaatg  aagcaacaaa  agcagagatt
75181  tattgaaaac  gaaagtacac  tccacagggt  gggagcaggc  ctaagcaggt  ggctcaaggg
75241  cctgaataca  gattttttctg  gggtttaaat  accctctaga  ggtttccatt  ggttacttgg
75301  tgtataccct  acgcaaatga  agaggatgaa  gggaggttac  aaagttattt  acttggtgta
75361  gaaaattagg  gttttttccct  tttatttagt  tgtaggaagc  ccttaggtta  cctgcctcca
75421  gaccctattc  tcctgcctca  ttttattcct  aattttgttg  tgaacctaaa  attgctctaa
75481  aaaatgaaat  cttttaaaca  agaaaataaa  cttataaatt  gcaaatatgt  gtcacttaca
75541  taaaaacaaa  gaattagtgt  ccctacatca  ggaaaaaaac  acctataatt  caatgtaaaa
75601  atgcaaaaaa  gccaagagaa  atggccaagc  catggaaatt  cacagaagta  gaaataggca
75661  gtaaataaac  aatgctcaat  ttcatttatc  tgagaaatgg  agagtaaaac  ttcagtgaca
75721  tacaaggag   taacaatcat  tttaggaaca  attttaaaaa  taacacttgt  gatgtggctc
75781  aggaaagatt  catattctca  ctgtaggaag  gtaagtgaat  cattttagag  gtcagttttg
75841  caacttagaa  gatcaaatgc  atctaccctt  tttctacttc  tagaaatgta  tcttcagaag
```

FIGURE 2 (cont.'d)

```
75901  tgcccctccc  tccctcacac  accccccaagt  gtacaaaaat  aaatgacatg  gatgtggact
75961  gcagccttgt  ttctaatacc  aaaaatcagt  aaacaaccta  aaaatctgta  tccatgagga
76021  tttaaagaaa  tcctgcatga  gttagaaaga  ataaggtaga  tgcctgggtt  ctaacataga
76081  aaatatcaaa  ctggttgtta  gatgaaaaaa  gcaagttgca  aagtgaggta  atgtgtaaat
76141  gcagtaagca  aaatacatca  tatatatagt  actttctatg  tatttaccta  tatgagcgtg
76201  atgcctccaa  ctgcatagct  gtggctccgg  gagcaggacc  ttgtaacaga  gcctctgccc
76261  ctgactgtcc  tgaggggcct  ttccctggga  aaggaaccag  gtttgatttt  cagtctcttt
76321  tgttatcacc  atgctgacag  ctttgcttgt  catatgcctt  tccctccgct  gtactgattt
76381  taccttacag  aagctctcct  tagtgcttca  tcagacactc  cctctttttcc  aaagaaaaga
76441  cagccgcatt  ccatggtcat  ctggttgagc  tcgaggtgag  ccccagggat  catgtgcctc
76501  ccaccaggct  gacaccccag  tggtgaggag  ttgccccttg  gcttttcga  ggccaagcaa
76561  ctcagaggtg  tggcaggatt  gcatgtcaca  gtggcacttc  caaggccctg  gagagtgact
76621  caacgcctct  gttattaaga  tgtcacacag  gctgtgcagc  aacaactcta  gggacaccct
76681  tcacactgac  agagttggca  agcttttcct  ataaaggggc  acacagtgaa  tactgtaggc
76741  tttgtaggcc  atactatctg  tcccaacaat  tcaactttgc  ccactgtagc  tgtgaatcaa
76801  ccgtagataa  tattaagtga  atgtgcactg  ctgtttgcta  atagtttatt  gacaaaaaca
76861  gctgcttttg  agcagtttgc  taccccgaca  gagactgtgg  ggagtccctg  gtggcagcga
76921  gctacaggca  gccagtaccc  catcagtgtg  gctggttcca  tcctctcaag  cctgcctgca
76981  cccagacact  gtcgagtgtg  tcttcagaaa  aactcctaaa  attccccaaa  agcacagtgg
77041  ctccccgaga  gccacctccc  tcaccttctt  acagggggcag  gttcctcttc  cggttccacc
77101  ctcctcagca  cggagctcag  gggccatccc  cacctcctct  tggccgcaag  cacagacctt
77161  cccacacagg  ctcagcagct  ctgcgggcct  gtcccccacc  tggagctgca  ggcctccact
77221  cctggggaca  gctgtgacca  tggctctgca  aagcagcctt  gtgcctagct  cccaagtcag
77281  ctggcagccc  agagtggaac  aattctgtgg  atcacctctg  agacagcagc  acatctgggc
77341  aagcctggct  tcccacccct  cacctcctgc  aacctctgac  ccttgccatg  catgtggtag
77401  ggaagctgca  accaggcctc  agcactccca  gacctgtggg  cggtttgctg  tctgaggatc
77461  gtggcactgc  cttccctcag  aggccttgcc  agagccaggg  gatgcagcgt  ggcagagctg
77521  tcactggcaa  ccctgctggt  ctccctggtg  ctttctcagc  tgggctgtgg  gtcaggacaa
77581  atttctatgg  ataaggctgg  atcataatct  agtgctccat  ggtcatgcag  cgacagactc
77641  gagtctgcct  tctctcaggg  tggtgagctc  aggtaggaac  gggatgtttg  aagcaagcac
77701  acctgtgaga  aatgcctgtt  ttcactccca  tcccacacac  tcgtccagac  actgccagcc
77761  caccccccgac  acacgtgtct  gagggaggct  gaggaaaaca  gacacctcca  ggagccgcat
77821  actatttcct  gatgtgtaag  ccagacaacc  ctggaaagga  ggtcagggaa  ccggagtgcc
77881  tgccaacgtc  cccagcctcc  ctgcagcaaa  acactctcat  ggcaaaactc  cttttttaaag
77941  aaaggcttta  ttgctgcaat  tagacatccc  agtgtatagc  acaaacccccc  ctgtacagag
78001  aattattcaa  gtggtaatac  tgagaaacag  tgaacacaca  caaaagaata  caaaactaga
78061  catttagatc  actagaaact  ttctaaggta  agaaaaattt  caaatgtgaa  gtgccttttta
78121  gaaactacac  cacacatgcc  agtgtaaatt  tggtttaaca  atcaatttct  ataaacattg
78181  catctaactg  tgcactgatc  aactgcacaa  cttcaacaat  tacttccaag  acaaagataa
78241  atgctttttat  ttccctatgt  tttggtcttt  ccttgggcta  gagacagaag  ctgcatgttt
78301  caaaccagat  tcaaaaggga  aagcacttca  aaacagaaag  tacttcaatt  gtgtatttgc
78361  cttcagccac  atccagagac  ttgtggatct  cacccggttg  gtcccagccc  ttctccaacc
78421  ctgaagccca  cagcaggggt  gcagaggcag  ccccagatcg  tgcagacatc  acccgaggct
78481  cccaaactgg  cccagctgcc  tgaggcctgc  atgcctgtgg  ccaggtagga  cacatgtgca
78541  ggtttgaaaa  ctaggcctac  aagactgaag  agtggactga  agcaaaaagg  ggagaaacat
78601  tagaggccta  cagtaggaag  agacctttta  tagagttttc  aggaaattct  cacaataaac
78661  ttgggcacaa  agaccaaatt  gctgaggcca  gaagcctgct  tatggtactg  tgacttatgg
78721  ggagtagagg  ccaaatcaga  gagggctggc  tggtgatacc  ccagaccact  tgcctcttcc
78781  ccttccctgg  cctacaaata  ccaggcctcc  tggccctgag  acctcattct  gggtttctat
78841  atgggtcaac  caaatgccat  cctttcacta  aacccaggtg  caaaatgggg  ggggaagggg
78901  ggaagctggg  gagtacacag  cacccaaaag  aaccgagaga  gcaagttttc  caaggctaca
78961  ggaacattgg  cagagctggt  ggccacacca  gatgggagta  ccacatcccc  accaggcttc
79021  atgcttcact  gctagatgca  ggggggctaga  agggtctgat  gaatcaggag  ctgaactaga
79081  accttcaaga  aaagaaaagg  caagggggtg  gctctgtgcc  ccgccaggag  aggaaagaag
79141  aatgtgtgtg  gattgtccac  agtgaggcca  gaaacgatga  gatggtgtta  ggcagaaaag
```

FIGURE 2 (cont.'d)

```
79201 aagggagagg gcttcccatg agaatctggc tgggcatggg agggatacag ggctcagtta
79261 tcaaggcacc tttgccatag tggggtgcca gctacattgg gtgggatgcc caggggctgt
79321 ccctacctaa gcactttctt gtctacagga agtcttggtg cttttcaagt tcagcataag
79381 gggttccata tgtgaagtgg ggattcacac ttagaaaatc tatcctggtc ttcacctgaa
79441 acactcatct actgctgggt ggcaggaaca agtatacaaa accaggggcc ttgcctgggc
79501 agttcctaag ggacattggc agggctgacc tgggattcag ctcccctgag tggacagtct
79561 gtggttgcct ggggtcccca ggctgagaag gggtatgggt aattgcactt cggggcacag
79621 tgaacacagg cacgggctgg atgtgccctg ggagacagaa aggagaggct gacctattct
79681 caggagctgg ctatggctgg acagtgcctg cccggccaga ggaaggccac agcagagcca
79741 ctccacagac taagacctgt gttgccaagg ctagcttaga gatccttcag cctcctggcc
79801 gacaaagcct gctgctatta agcccacacc gtagcttaga gatccttcag cctcctggcc
79861 ttcaaaacaa actccagggc ttccactctg aaaggcaaag gaatcacctc gtgtttgctt
79921 catcccctta gcaggatgaa cgaaacgcct aaggcccaaa aagactgagg gcaggacccc
79981 cagcatctcc catctcctcc gtgcaggctg ggtgagagaa tggcctggaa aggaagcatc
80041 tgcgctacat tgtgcttcag gcccccccag caactttccc ggaggtaact atttgcctgg
80101 aaaactagga aactgggttt taaaaacaga attttaagca gactttttag agggacaagg
80161 ccatttgatg gtagtgattt tggttttgtt ttatgaaaat ggtacaggtg gtaatccctg
80221 atgacagaat gcactgagag tggggccaag ggccggagcag tggcacagcg gaccctggca
80281 gttaaggcga cagctgggcg ggcatgtggc cggggagcag tggcacagcg gaccctggca
80341 gtttgctcac acctggccct cgtcccagag ccagcaccca tgcctcttgg ccctggtagt
80401 gactccacag aacttccccg agcagaagcc tcacagtggg ccagcaccca tcttgcatgc
80461 aagggagaac ctgcatgcag tgcacacacc ccggccaggg tggcacatgg ctgctctttc
80521 aatgtgaagc caacaccaac tggagagatt taactataaa ggaatatttt ttaaatattc
80581 agttttgttg tcattactca cttcctttcc ttccatttcg atctcagaaa ctgttctttt
80641 tcagtgttga caaaaaagaa atgtatgggc caggtctaca aagtaacacc ttgtcataaa
80701 acaggctcaa aagcatagga atcatgcttt aattgccatt tagcatccac taattcccat
80761 gagatctgtg attaaaaaaa aagcctctgg cctgcttgtc ctgtcttaaa agtcatgagt
80821 ctgttttatg aacagaaaga atgccacgct tcttagcata tgtaaggcaa aatggatttt
80881 tgatctctca tgatgtaaag gagatacaaa ggtaaggaag ggaagatttc taagtgagac
80941 ttttttttgag tgtcaatccc gctggacaca catattacaa aataaagatt ttcttctgta
81001 aagtgctgtt tgctcagtga atcatgcgcc accacagagc accatggctc cacctgctca
81061 agagcatgga ggaggcagca tcggcagagg gcaggcagga gtctgtgttt gggggtctgt
81121 ttcaatacca tctcctgggg ttcgccgtgg tgcagaggga atcttctcgt catggctaga
81181 cactccccaa tgctctgctc caggctcggg accactgcaa gctggaggcg gctgggtatc
81241 agggcctggg cacccctgct cctcctcttc ccttgggatt ggcattttat tctctcattc
81301 agctcaagac catgggcagg aactctgctg gctccccatg atgtcatcat ggggtcttcc
81361 actttcccac agagctgcca ggcagaggca ggacccaggc atgcctggcc cacaggaagg
81421 ttttctagga gactaaggag ggtttagaaa aagagaagcc actataaata gtcacctgtc
81481 cagtctatgc tattaaagga cataaagaag gtatacaatt ggcagtaaac aatttccttc
81541 agctcttcat ggatgtccag gaaaatgaca acccgcacac aatcagacgt gaatgatttc
81601 tgctccagtg tcttcaggct ctgtgcaaca agaagagttt gtgtcggaat gacagattcc
81661 atatccatgt ttattttcaa agtttgggctc tgttagtgga gattttcaa aaatattctt
81721 tttgcttgtt tctggacagt tttgaacata gatcactcta ttataggcct tgagtctctt
81781 ccacaattgc acatacactt tacactgaac atacataaaa agaagtcctc cggtgaagcc
81841 gatggccaca accaccaatt tagtccaaaa gggccattct aggattcctg gaagggaaaa
81901 actcagccta ttagatttta tttaagatat gtcttcacca cggggctgaa gnnnnnnnnn
81961 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
82021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nggcggtgac tgtgacattg aggttcggcg
82081 tcgggggaga gggaaaagga gagggagagg gagagggaga gggaggaggg gagggagagg
82141 gagagccata tgtagtttaa agtagttttt ttccaattct gagagaggga tcattggtag
82201 cttgatgggg atggcaatga ctctataaat taccttgggc agtatggcta ttttcacgat
82261 attgattctt cctacccatg agcatggaat gttcttccat ttgtttgtat cctctttttat
82321 ttccttgagc agtggtttat atttctcctt gaagaggtcc ttcacatccc ttgtaagttg
82381 gattcctagg tattttattc tctttgaagc aattgtgaat gggagttcac tcatgatttg
82441 gctctctgtt tgtctgttat tggtgtataa gaatgcttgt gattttttaca cattgatttt
```

FIGURE 2 (cont.'d)

```
82501 gtatactgag actctgctga agttgcctat cagcttaagg agattttggg ctgagacgat
82561 ggggttttct aggtatacaa tcatgtcatc tgcagacagg gacaatttga cttcctcttt
82621 tcctaatcga atgccctta tttccttctc ttgcctgatt gccctggcta gaacttccaa
82681 cactatgttg aataggagtg gtgagagagg gcatccctgt cttgtgccag ttttcaaagg
82741 gaatgcttcc agttttttgcc catgatgtat gatattggct gtgggtttgt catagatagc
82801 tcttattatt ttgagataca tctcatcaat acctaattta ttgagagttt ttagcatgaa
82861 gcgttgctga attttgtcaa aggcctttttc tgcatctatt gaaataatca tgtggttttt
82921 gtcattggtt ctgtttgtat actgggttac atttattgat ttgtgtacgt tgaaccagcc
82981 cttgcatccc agggatgaag cccacttgat catggtggat aagcttttttg atgtgctgct
83041 ggattcgttt gccagtattt attgaggatt tttgcatcga tgttcatcaa ggatattggt
83101 ctaaaatggg ttttttgttg ggtctctgcc cagctttggt ctcaggatga tgcctcccct
83161 attaaaagag ggagggagga ttccctcttt ttctattgat tggaatagtt tcagaaggaa
83221 tggtaccagc tcctccttgt acctctggta gaattcggct gtgaatccttt caggtcctgg
83281 actgtttttg gttggtaagg tattaattgt tgcctcaatt tcagagcctg ttattggtct
83341 attcagagat tcatcttctt cctggtttag tcttgggagg gtgtatgtat ggaggaattt
83401 ttccatttct tctagatttt ctagtttatt tgcatagagg tgtttataat attctctgat
83461 ggtagtttat atttctgtgg gatcagtggc gatatcccct ttatcatttt ttattgcatc
83521 tatttgattc ttctgtcttt tcttctttat tagtcttgct agcggtctat caattttgtt
83581 gatctttttca aaaaaccagc tcctggattc attgattttc tgaagggttt tttgtgtctc
83641 tatttccttc agttctgctc tgatcttagt tatttcttgc cttctgctag cttttgaatg
83701 tgtttgctct tgcttctcta tttctttttca ttgtgatgtt agggtgtcaa ttttagatct
83761 ttcctgcttt ctcatgcggg catttagtgc tataaatttc cttctacata ttgctttgaa
83821 tatgtcccag agattctggt atgttgtgtg tttgttctca ttggtttcaa agaaatatctt
83881 tgtttctgcc ttcatttcat tatgtaccca gtagtcattc aggagcaggt tgttcagttt
83941 ccatgtagtt gagtggtttt gagtgagttt cttagtcctg agttctagtt tgattgcact
84001 gtggtctgag agatagtttg ttacaatttc tgttctttta catttgctga ggagagcttt
84061 acttccaact atgtggtcaa ttttggaata ggtgtggtgt ggtgctaaaa aaaatgtata
84121 ttctgttgat ttggggtgga gagttctgta gatgtctatt aggtccgctt ggtgcagagc
84181 tgagttcaat tcctgggtat ccttgttaac tttctgtctc gttgatctgt ctaatgttga
84241 cagtggggtg ttaaagtctc ccattattat tgtgtgggtg tctaattctc tttgtagatc
84301 tctaaggact tgctttatga atctgggtgc ccctgtactg ggtgcatgta tgtttagtat
84361 agttagctct tcttgttgaa ttgatccctt taccattgtg taatggcctt ctttgtctct
84421 tttgatcttt gttggtttaa agtctgtttt atcagagact aggattgcaa cccctgcctt
84481 tgttttccat ttgcttggta gatcttcctc catccctttta ttttgaacct atgtgtgtct
84541 ctgcatgtga gatgggtttc ctgaatacag cacactgatg ggtcttgact ctttatccag
84601 ttttccagtc tgtgtctttt aactggaaca tttagcccat ttacttttaa ggttaatatt
84661 gttatgtgtg aatttgatcc tgtcattatg atgttagctg gttattttgc tagttagttg
84721 atgcagtttc ttcctagcat cgatggtctt tacaatgtgg catgttttttg tggtggctgg
84781 tatgggttgc cccttttccat gtttagtgct tccttcagga gctcttttag ggcaggcctg
84841 gtggtgacaa aatctctcag catttgcttg tctgtaaagg attttatgtc tccttcattt
84901 atgaagctta gtttggttgg atatgaaatt ctgggttgaa aattcttttc tttaagaatg
84961 ttgaatattg gccctcactc tcttctggct tgtagagttt ctgccaagac atgagctgtt
85021 agtctgatgg gcttcccttt gtgggtaacc tgacctttct ctctggctgc tctcaacatt
85081 ttttccttga tttcaacttt ggtgaatctg acaattatgt gtcttggagt tgctcctctc
85141 gaggagtatc tttgtggcat tctctgtagt tcctgaattt gaatgtttggg ctgccttgct
85201 agattgggga agttctcctg gataatatcc tgcagagtgt tttccaactt ggttccattc
85261 tccccgtctc tttcaggtac accaattaga tgtagatttg gtcttttcac atagtcccat
85321 gtttcttgga ggctttgttc atttttttt tctttttttct ctaaacttct cttcatgctt
85381 catttcattg atttgatttt ccatccccaa tacccttttct tccagttgat tgaatcagct
85441 actgaggctt gtgcattcat catgtagttc tcatgccatg gttttctgct ccatcaggtc
85501 atttaaggac ttctctgcat tggttattct agttagccat tcatctaatt tttttttcaag
85561 gtttttaact gctttgccat gggttcggac ttcctccttt agctcagagt agtttgatca
85621 tctgaagcct tcttctctca actcgtcaaa gtcattctcc atccaggttt gttctgttgc
85681 tggtgaggag ccgtgttcct ttggaggagg agaggcactc tgattttttag agcttccagt
85741 ttttctgctc tgtttgttcc tcatctttgt ggttttatct acctttggtc tttgatgatg
```

FIGURE 2 (cont.'d)

```
85801 gtgacgtaca gatggggttt tggtgtggat gtcctttctg tttgttagtt ttccttctag
85861 aattcaggac cctcagctgc aggtctgttg gagtttactg gaggtccact ccagaccctg
85921 tttgcctggg tatcagcagc agaggctgca gaacagtgga tattggtgaa cagcaaatgt
85981 tgctgcctga tcattcctct ggaagttttg tctgagagga gtacccagcc gtgtgaggtg
86041 tcagtctgcc cctactaggg ggtgcctccc agttaggcta ttcgggggtc agggacccac
86101 ttgaggaggc agtctgccca ttctcagatg tcaagctgtg tgctgggaga accacttctt
86161 tcttcaaagc tgtcagacag ggacatttaa gtctgcagtg gttattgctg tcttttgttt
86221 gtctgtgccc tgcccctgga ggtggagtgt acagaggcat gcaggcctcc ttgagctgtg
86281 gtgggctcca gccagttcaa gcttcccggc tgctttgttt acctactcaa gcctgggcaa
86341 tggcgggcac ccctccccca gcctcgctgc cgccttacag tttggtctca gactgctgtg
86401 ctagcaaaga gtgaggctct gtgggtgtag aaccctccaa gctatgtgtg ggatataatc
86461 tcctggtgtg ctgtttatta agcccattgg aaaagcacaa tattagggca ggagtgaccc
86521 aattttccag gtgccatctg tgaatgcttt ctttgactag gaaagggaat tccctgacct
86581 cttgcccttc ccaggtgagg tgatccctca ccctgctttg ggtcacgcat ggtgtgctac
86641 acccactgtc ctgcaaccac tgtctggcac tccccagtta gatgaacccg gtacctcagt
86701 tggaaatgtg gaaatcacct gtcttttgca tcgctcatgc tgggagctgt agactggaac
86761 tgttcctatt cagccatctt ggctccacgt atatccactg ccacacttct ttagtcataa
86821 agtgagtgcc ttggtcagag gcaatgctgt gtggaatacc atgatggtgg ataaggcatt
86881 ctgtgagtcc atgaatggta gtcttggcag agcattgtgt tcagtttagg caaacccata
86941 tccagagtaa gtgtctgttt cagtgaggac aaacctctgc cctttcagg atggaagagg
87001 tccagtataa ccaaccttcc accaggtaac agactgatca ccccgaggaa tggtgccata
87061 ttgagggctc agtgttagtc tctgctgctg tcaaattggg cactcagctg tagccatagc
87121 caggccagtt ttggtgagtg gaagtccatg ttgctgagcc catgtataac ctccatccct
87181 gccaccatgg ccactttgtt tatgggccca ttgggtgata acaggggtgg ctggggaaag
87241 aggctgagtg atgtccacag aacaggtcat cttatccact tgattattaa aatcctcctc
87301 tgctgagatc acccattggt gagcactcac atgggatcca aatatcttca caggttttgg
87361 ccactcagag aggtccatcc acatacctct tccccaaatt tctttgtcac caattttcca
87421 atcatgcttc ttccaagtcc ctgaccatcc agccaaacca ttggctacag cccatgaatc
87481 aatatataat cgcacatctg gccatttatc cttccatgaa aagtgcacaa ccaggtgcac
87541 tgcttgaagt tctgcccact gggaagattt cccttcacca ctgcccttca gtgatgtcct
87601 agaaaggggc tgtagtgctg cagctgtcca cttttgggtg gtgcctgcat atcgtgcaga
87661 accatctgtg aaccaggccc tagtcttctc ttcctctgtc aactgatcat agagaactcc
87721 ccatgaggcc atcggtgcag ctggggaag agaaggtggg gtggcagttg tggagaccat
87781 gggcatttga gctacttcct tgtgtaactt acttgtgcct ttaggacctg ctcgagccca
87841 atcacatata tatcacttcc atttgatgat ggaatgctgc tgtgcatgac ccattttatg
87901 gctacatggg tcagaaagca cccagttcat gatagacagt tcagttcaca tggtgacttg
87961 atgacccata atcaaatgtt cagtttccac caaagctcag taacaggcca agagctgtct
88021 ttcaaaagca cagtagttat atgcagaaaa tggcagggcc ttgtttcaaa attttagagg
88081 catctgctgt gattcacctg tgggggcctg ccaaaggctc caaacagcat ccctatctgc
88141 cactgatgcc tcaagcacca ttggatctgc tgagtcatat ggcccaaaca gcagagcagg
88201 ttggacagca gcctggacct gaggcagagc cttatcctgt tctggacccc actcaaaact
88261 ggcagccttt tgagtcactc gataaatggg cctgagtaac acaccaaat gaggaaagtg
88321 ttacctccaa aatccaagta ggcccactac atattgtgcc tttttcttag ttgtaggagg
88381 ggccaaatgc agcaacttat ccttcatctt acaaggagta tcttgacagg ccccacacca
88441 gtggacccct agaaatgtta ctgaggtaga aggtccctga attttagtca aatttatttc
88501 tcatcctctg gcacacaaac atctcacaaa taagtccagt gtgtttgcta cttcttgctc
88561 actggatccg atcagcataa tgtcatcaat gtaatcgacc agtgtgatat cttgcagaag
88621 caaaaagtgg tcaagatctc tccaaataag attatgatgc aaagccagag tttatatact
88681 cttgaggtag gagagtaaag atatattgct agtcttgcca gctgaaggca aattgcttct
88741 agtgggcctt atgaatagga atggagaaaa aggcatttgc caagtcaatg gctgcatacc
88801 aggtaccagg aaatgtgtta atttgctcaa gcaatgaaac cgtatctggt acagcagctg
88861 caattggagt caccacttag ttaagcttat gataatccac tgtcattctc caagatccat
88921 ctgtcttatg cacatgccaa atgggagagt tgaatggggg tgtgatgaaa atcaccaccc
88981 ttgcgccttt caagtccttg atcatggcac taatctctgc aatccctcca gggatgtgat
89041 attgtttttg atttaccatt tttctaggta gaggcagctc taatgccttc catttggcct
```

FIGURE 2 (cont.'d)

```
89101  ttcccaccat aataggcctc accctaccag tcagggagcc aatgtgggtg ttcttccagc
89161  tgctaagtat gtctatgcca attatgcatt ctggcactgg ggaaatgaac acaggatgag
89221  cctggggacc cattggaccc actgtaagtc agacctgagc taaaactcca ttaattacct
89281  cacctccata agctcctgct ttaactggag gaccacaatg acgttttgag tcccttagaa
89341  ttaacgtcag ctcagagcta gtgtcctgta atcccccaaa tgactgataa tttccctttc
89401  cccaatgcac agttaccttg ataaaaggct ggaggtctcc ttgggaaaaa atgggagaaa
89461  gattaacagc ataaattgtt ggtagtgtag tgggctcctt ccttaatggg acccaacttc
89521  ccctttattc aaggggttct gtgtctgtaa actggctcaa gtcaaaaatt gattgagggg
89581  ccatgattct ctatttttat aattcaaagt agtgtttttgt ccatttgacc tggaagtttt
89641  ctgcttatat aaattaagta ggaaagaagt aggcatccta acaatttcac ttctgggaac
89701  actgtgatta attagcgaat gccagaactc tacatgagtc agactattct gattgctgct
89761  ttgccactac tgtctgttat ggtagttatg cccaccttgc ctttgatggt tgagtgccac
89821  cacttggcct ctgccacctt gggatccaat tattcccatt gtatttacct ttattagttg
89881  agtgactgtg gttctcacca ttggatctga tatgcagaga attacggggc tcttcaaaga
89941  tgcaggtgct accctcacag atctattttg caaggtattg gtcaagggta tatcttctgg
90001  gcccttccat ctgggatgag taggtctaaa gtgactaatc cactccacca tctcaatctc
90061  tctaagcctt tggatccctt cctctacatt aaaccaagag tgatcagaca tttccagctc
90121  cctcacagtg gccatctttc aatccatatt tcagctaact aagcaaataa attattagaa
90181  ccttttttta actccctgag ctgcaatatt aaatgcagag tctctactta gtgggcccaa
90241  atcaacaaat tcagcctgat ccaactctat gttccttcca ccattatccc acacccttaa
90301  tatccattct catgcctgtt ctccagattt ctgtttatat aaattagaaa actcaagtag
90361  ttcttttcaa gtatagtgaa cctcctcatg ggtttcactc tcaacctcac ctcttggggc
90421  ccataaggac tttagtctgg ttataggtct agaagcagac aggggtgttg ggggtggctc
90481  ctgaggagaa tcaacattat tttgcctggc aactgctcag ggggggccat cactgttgcc
90541  ttaggcagca cagtgtttat ctccccagac aaatatggaa aggctgatgg cagcatgggt
90601  cagggagagg atgtcaccac tactggggat ggggaagctg ttttttttct ggcaaaaaag
90661  gtttcctgag actttacaaa ctcagtgtcc ccagcttcat cagggtcctc ccacatgtcc
90721  cctttccaag ttgcagggtc ccattctttt ccaaacgatg ccctcacttt aatagtacat
90781  acctggtgag gctgtgcatg cacccttcat tggaagtcag ccacttgcac aataagagct
90841  catatccatt ttcccacaat ttcagctctt tctctgcagg agataatact ttcactcagg
90901  gcaatcttag cagatttgag gctcagtatc tgcttctgaa gccaggagtt agaatcccta
90961  agttcatttt ctttcatcac tttgtccatt gaacttagga gaaaccaacc aacttcatta
91021  tgtttccaca tatggtcaaa ggtattattt atagagtcac taaactcctt gcctctcatg
91081  agcgctgaat caggaatgtc aaatgcattt attttgctta actctctaaa cagttcatag
91141  aaaggaacac tgaatcagtg ttctccatac tatcagaagt agagtcctta gcattttttga
91201  gtctaatcat attaaacagc cactccagaa accctaaaac caatgaaaga actgcatcct
91261  taatgttctg ttcctctaga accactcctg gtacaaaaat ctgtgttagg gttctctaga
91321  ggggcagaac taataggata gagatatata agaaggaaag tttattaagt attaactcac
91381  atgatcacaa ggtcccacaa taggatatct gcaagctgag gaacaaggag agccagtcca
91441  agtcctaaac tgaagaactt cgagtctgat gttcaagggc agggagcatc cagtaccaga
91501  gaaagatgta ggctgggaag ctaggccagt ttagtctttt catgtttttc tgccaacttt
91561  tcatattcta gctgcactgg cagctgatta gatggtgccc acccaggtta agcgtgggtc
91621  tgcctttccc agcccactga ctcaaatgtt aatctccttt ggcaacacct tcacagacac
91681  acctaggatc aatactttgc atccttcaat ccaatcaagt tgacactcag tattaaccat
91741  cacagaagca ttatctacta ataccaccat ataaaagatg cggatgttag catagttatc
91801  acactgtttc ctcacacaat ccactaccca tggcttggtt tctatggaca tattattgga
91861  tctgagccag cttattataa tgttttaaat aatattcaag aattgttaca attgcatttt
91921  gaattgttat tatttaaata taggtcaatt ctaaatagaa ttcttgtcca tagtcagatt
91981  ttacatcatg atttcctcac tcatgacatt taaaagttta tttgttaaat ttagccaata
92041  tatacaagtc tgcatttggg gatgggtaat tgaatgccat tttaattttt tgggtaatgg
92101  agacttttt tatgttgcct ttatatttga tccataacta ggctatgtag tacatttctg
92161  ggtcaaatct ctattgcttt aaaactttgt ggttttgctt cattatctcc tagtatctac
92221  agttactgaa gtgatacgta caaccagctt tggacatgat gaatgtttta ggctaaagac
92281  ttgggtgttc tttggtcttt ggaagttttc tttaatactc tctttaaatt tgtctgattc
92341  cacttcttgg ttcccttttc aggaacacca agtattcaca cagtggatag tcatctgtcc
```

FIGURE 2 (cont.'d)

```
92401  tctacttcta  aaattttgtt  atttaacaaa  atgttataaa  agtagaatca  catttatgta
92461  accttttttgg  attgatgttt  tttgctcagc  ataatttcct  ggcaatccat  ccaagttgtt
92521  gcatgcatca  atcatccatt  cctttacatt  gctaagtagt  attccatgct  atgtatttac
92581  aacagtttgt  ttacccattc  acctgttgaa  aaacatcttg  gctgaatcta  gttcttagct
92641  attaatatta  taaacaaaga  tgctataaac  atttgtttga  cagttttttg  tgtgaagttt
92701  ttatttttct  gggataaatg  cctgggagtg  caattgctgg  gtcatatgat  agttgtgtgt
92761  ttttctttga  gaaactccca  aaatttccca  gagtggatga  agtattttat  gtttctatca
92821  gtaatgtatc  agtgatccgg  tttctacaca  tccttaccag  catttggtgg  tgtcatgatt
92881  tttaattttta  gccattctga  tagatgagta  gtgatagctt  attgttgttt  caatttgcat
92941  ttccctaaaa  cctaataatt  ttgaacatct  tttcatgtga  ttatttgctg  tccatgaaat
93001  atctgtggaa  acagtgagta  gaaggatgct  ttccacagtc  tgagaaggac  agctgggaga
93061  ggtggatgaa  gagaggttgg  tatatggggta  caaaaataca  attaagacct  ctggtccatg
93121  ctgggcacag  tggctcatgc  ctgcaatccc  agcactttgg  gaggccaaag  cgggtggatc
93181  acctgaggtc  aggagcttaa  gaccagcttg  gccaacatgg  tgaaaccctg  tctctactga
93241  acatacaaaa  attagccggg  catggtggtg  cgtgcctgta  atcccagcta  ctcaggaggc
93301  tgaggtggga  gaatcactta  aacccgggag  gcgaagtttg  cagtaagccg  aggtcacacc
93361  actgcactcc  agcctgggca  acagagcact  ccagccgggg  caacagagca  agactctgtc
93421  tcaaaaaaat  aaaataaaat  aaagtaaaac  aaaataaaga  gttccaatcc  agcagagagt
93481  gtggtgagat  ggtgcgggac  cagctccctg  ggacttctga  gcctttgccc  tggccagtgg
93541  gggagctgag  ccaggatagg  ctgtagcctc  tgccccgtga  caccaggacc  cttgtggtgg
93601  ctgccaccag  gacccttggg  gtgggtgcct  gggccttgaa  gatgcagcaa  gcctcccttc
93661  cccctacacc  tcagtgactg  agggtggtgg  tggcctttcc  caggccgcac  cctgccgggt
93721  atagacgaag  tccccactga  gcctggatgc  agtgcctttg  ggtggtggtg  ggagtggcag
93781  gggcagcttg  gtgactatcc  gggtgtgagg  attgggaagg  tgctcttggg  atgcaggaca
93841  cgggctcagc  cacctctttca  ggccatggcg  ctgccagatc  cgggtcctgg  tgaccactct
93901  gtcccagctg  ggtgagactt  acctagtcct  gaggacaaca  gacaatggcc  ttaataggcc
93961  tggaaggtga  gtggaggcac  agaggaggac  agtgtggaac  agttagcagg  cattgggctg
94021  ttggtcttcc  ttctaccaga  cctggaagga  cctcacattt  ggcctatggg  aaatgcccgc
94081  cacactttgg  gaagatttac  tatctgcttc  tagaaggctg  tgtgtatatt  atgaaaaagc
94141  tattctcaac  tcacccccaa  ccttttaata  gataacatct  gtggggaggc  tgacaagatg
94201  gctgaataga  aacagctcag  gtgtgcagct  cacagtgaga  tcaatgcaga  aggtgggtga
94261  tttctgcatt  tccaactgag  gtacccggct  catctcattt  ggactggtta  gacagtgggt
94321  gcagcccatg  gagggtgaac  tgaggcaggg  tggggtgttg  cctcacctgg  gaagtgcaag
94381  gggtcagaaa  actcccctgt  tagccaaggg  aagctgtaag  gagctgtgcc  atgaggagtg
94441  gtgcattcca  gcccagatac  tatgcttttc  ccatggtctt  tgcaacccac  agaccaggag
94501  attccctcca  gtgcttatgc  caccagggtc  ttgggtttca  agcacaaaac  tgggtggcca
94561  tttgggtaga  caccaaggta  gctgcaggag  tcttttttca  taccccaggg  atgcctggaa
94621  tgtcagcgag  acagaaccat  tcactcccct  ggaaagggggg  ccgaagccag  ggaaccaggt
94681  ggtctagctc  agtggatccc  accccatgg  agcccagcaa  gctaagatcc  actggcttga
94741  aattcttgct  gccagcacag  tagtctgaag  ttgacctggg  atgctggagc  ttggtatggg
94801  gaggggcgtc  tgccattact  gaggcttgag  taggcagtgt  tcctctcaca  gtgtaaacaa
94861  aactgcaagg  aagttccaac  tgggtggaac  acaccacagc  gctgccaggc  tgctgtagca
94921  agactgcctc  tctagattcc  tcctgtctgg  gcaggcatc  tctgaaaaaa  aggcagaagc
94981  cccagtcagg  gacttataga  taaaactccc  atctctctgg  gacagagcac  ctgggggaag
95041  gggcagctgt  gggtgcagct  tcagcagatt  ttaacatccc  tgcctgccag  ctctgaagag
95101  agcagtggat  ctcccagcac  agtgtttgag  cagactgcca  cctcaagtgg  gtccctgacc
95161  ccctggcctc  ctgaccggga  gataccttcc  agaagaagcc  aacagacacc  tcacacaaga
95221  gagctccagc  tggcatctgg  caggtgcccc  tctgggacaa  agctttcaga  ggaaggaaca
95281  ggcagcaatc  tttgctgttc  tgcagcctcc  actggtgata  cccaggcaaa  caaggtctga
95341  agtagatgtc  cagcacactc  cagcagacct  gcagcagaga  ggcctgactg  ttagaagaaa
95401  aactaacaaa  cagaaaggaa  tagcatcaac  atcaacaaaa  aggacatcca  ctcagaaacc
95461  ccatccaaag  gtcaccaaca  tcaaacacaa  aaggtaggta  aatccatgaa  gatggggaga
95521  aaccagcaca  aaaaggctga  aaattccaaa  aaccagaatg  cctcttcttc  tccaaaaaat
95581  cacaacttct  caccatcaag  ggaacaaaac  tggatggaga  atgaatttga  tgaattggca
95641  gaagtaggct  tcaaaggtgg  ataataacaa  actcctctga  gctaaaggag  aatgttctaa
```

FIGURE 2 (cont.'d)

```
95701 cccaacgcaa ggaagcaaag aaacttgaaa aaagattaga tgaattgcta actagaataa
95761 cgagtttaga gaagaacata aatgacctga tggagctgaa aaacacagca caagaactta
95821 gtgaagcata cacacatatc aatagctgaa tcgatcaagt ggaagaaagg atatcagaga
95881 ttgaagatca acttgcagaa accctataag ccagaagaga ctaggggcca atattcaaca
95941 ttcttaaaga aaagaatttt caatgctgaa tttcatatcc agccaaacta agcttcataa
96001 gtgaaggaga aataaaattc tttacagaca agcaaatgtg agacattttg tcgtcaccac
96061 gcctgcatta caagagctcc tgaagggagc aataagcatg gaaaggaaaa aatggtgcca
96121 gccactgcaa aaacatgcca aatggtaaag accatcaacg ctatgaagaa actgcatcaa
96181 gtaatgggca aaataaccag ctagcatcat aatgatagga tcaaatttac acataacata
96241 ttaaccttaa atgtaaatgg gctaaatgcc ccaattaaaa gacacagact ggcaacatgg
96301 ataaagagtc aagacccatc agtgtgcagt attcaggaga cccatctcac atgcaaaaac
96361 acacataggc ccaaaataaa gggatggagg aatatttacc aagcaaatgg aaagcaaaaa
96421 acaaacaaac aaacaaacaa acaaacaaac aggggttgca atcatagtct ctgataaaac
96481 agactttaaa ccaacaaaga tcaaaagaga aaaagaaagc cattacatag tggctaagaa
96541 gagctaacta tcctaaatat acatgcaccc aatacaggag cacccagatt cataaggcaa
96601 gttcttaaac acctacaagg agacttagac tcccacacaa taatagtggg agattttaat
96661 accccactgt caatatcaga caggtcaatg agacagaaaa ttaacaagga tatctaggaa
96721 ttgaactcag ctccagacta agcagaccta atagacatct atagaactct ccaccccaaa
96781 tcaacagaat atacattctt ctcagcacca catcgcactt attctaaaat tgaccacata
96841 attggaagta aaacactcct cagcaaatgc agaagaatgg aaatcataac aaacagtctc
96901 tcacaccaca gcgcaattaa attagaattc agaattaaga aactcactca aaacctcaca
96961 cttacatgga aactgaacaa cctgctcctg aatgactgct ggataaataa tgaaatgaag
97021 aaggataaag atgttgtttg aaaacaataa gaataatgta ccagaaactc tgggacatat
97081 ttaaagcagt gtgtagagga aaatttatag cagtaattgc ctacaaaaga acacaggaaa
97141 gatctaaaat cgacaccta acatcacaat taaaagaact agagaagcaa gagcaaacaa
97201 attcaaaagc tagcagaaaa caagagataa ctaagatcag ggcagaactg aaagagatag
97261 agacatgaaa aacccttaaa aatcaattaa tcgctctccc tctccctctc cctctccctc
97321 tccgtctccc tctccgtctc cctctcccca cggtctccct ctcctctct ttccacggtc
97381 tccctctgat gccgagccga agctggactg tactgctgcc atctcggctc actgcaacct
97441 ccctgcctga ttctcctgcc tcagcctgcc gagtgcctgc gattgcaggt gcgcgccgcc
97501 acgcctgact ggtttttctct gcccggccag ccgccccgtc cgggagggag gtaggaggtc
97561 agcccccgc ccggccagcc gccccatccg ggaggtgagg ggtgcctctg cccggccgcc
97621 cctactggga agtgaggagc ccctctgccc agccaccacc ccgtctggga ggtgtaccca
97681 acagctcatt gagaaggggc catgatgaca atggcggttt tgtggaatag aaaggggggga
97741 aaggtgggga aaagattgag aaatcggatg gttgccgtgt ctgtgtagaa agaagtagac
97801 atgggagact tttcattttg ttctgtacta agaaaaattc ttctgccgtg ggatcctgtg
97861 gatctgtgac cttacccca accctgtgct ctctgaaaca tgtgctgtgt ccactcatgg
97921 ttaaatggat taagggtggt gcaagatgtg ctttgttaaa cagatgcttg aaggcagcat
97981 gctccttaag agtcatcacc actccctaat ctcaagtacc cagggacaca aacactgcgg
98041 aaggcagcag ggtcctctgc ttgggaaaac cagagacctt tgttcacttg tttatctgct
98101 gaccctccct ccattattgt cctatgaccc tgccaaatcc ccctctgcga gaaacaccca
98161 agaatgatca ataaaaaaat aaataaataa aaataaaaat aaaataaaat aaaataaaaa
98221 aagaaataaa cacaaataaa atgttaaaat tcccattcta cataaaatca tctatagatg
98281 tttttaaata tacaacatga ttatcaagga cttaatctgt accacattct tgtagatgta
98341 aagttaaaat tcttgtaacc atcactctca accctaccct atcttccagc ataaatgaga
98401 ctttcacatg ttttctcttg cccagatgga gacactaact gtaggctttg gaaatgtctt
98461 aaaaaaaaaa aaaaaaaaaa gagagccagg catcttcaaa cagagaaaag ctgtttgaac
98521 acatttatct aagtctatca aaagctatga ttgttagcaa gaggtaacct tgtaatgcca
98581 aggcagaaaa ctgccaccaa accacaaaaa gcttgttcaa ctgctgaacc taaaattaaa
98641 caatttatct ctcattaaaa aaaaaaatc aattaatcca ggagctggtt ttttttaaa
98701 gatcaacaaa atagatagac cactagccag actaataaag aggaaaagag agaagagtca
98761 aatagacata ataaaaaatg ataaaggaga tatcaccact gatcccacag aaatacaacc
98821 taccatcaga gaatattata aacacctcta tgcaaataaa ccagaaaatc tagaagaaat
98881 ggataaattc ctggacacat acaccctccc aagactaaac caggaagaag tcaaatccct
98941 gaataagcca ataacaaact ctgaaattga ggtggtaatt aatagcctac caaccaaaaa
```

FIGURE 2 (cont.'d)

```
99001   aagtccagga ccagacggat tcacagctga attctaccag aggtacaaaa ggagctggta
99061   ccattccttc tgaaactatt ccaaacaata gaaaaagaga gaatctccct aactcatttt
99121   acgaggccag catcatcctg ataccaaagc ctggcagaga cacaacaaaa aaagaaaatt
99181   tcaggccgaa atccctaatg aatattgatg caaaaatcct cagtaaaatt ctggcaaacc
99241   gaatccagca gcacatcaaa aagcttatcc accatgatca agttggcttc atccctggga
99301   tgcaaggctg gttcaacata tgcaaattaa tgaacgtaat gcatcacata aacagaacca
99361   atgacaaaaa ccatgtgatt atctcaatag atgcagaaaa gaccttcgac aaaattcaac
99421   agcccttcac gctaaaaact ctcaataaac tagatattca tggaacatgt ctcaaaacaa
99481   tcagagctat ttatgagaaa cccacagcag ccaatatcat actgaatggg caaaaactgg
99541   aagcattccc tttgaaaact ggcataagac aaggatgccc tctctcacca ctcctattca
99601   acatagtatt gggagttctg gccagggcaa tcaggcaaca gaaagaaatg aaggatattc
99661   aattaggaaa agaggaagtc aaattgtctc tgtttgcaga tgacatgact gtatatttag
99721   aaaaccccat catctcagcc caaaatctcc ttaagctgat aagcaacttc agcaaagtct
99781   tgggatacaa aatcaatgtg caaaaatcac aagcattcct atacaccaat aacagacaaa
99841   ccgagagcca aatcacgagt gaactcccat tcacagttgc tgcaaagaga ataaaatact
99901   taggaatcca acttacaagg gatgtgaagg acctcttcaa ggagaactac aaatcactgc
99961   tcaatgacat cagagaggac acaaacaaat ggaaaaacat tccatgctca tggataggaa
100021  gaatcaatat cgtgaaaatg gccataatat ccaaagtaat ttatagattg aatgctatcc
100081  ccatcaagct accactgact ttcttcacag aattggaaaa aactacttta aatttcatat
100141  agaaccaaaa aagagcctgc atagccaagc caatcttaag caaaaataac aaagctggag
100201  gcatcacact acctgacttt aaactatact acatggctgc agtaaccaaa acagcatggt
100261  actagtacca aaacagatat atagaccaat ggaacagaac agaggcctca gaaataacac
100321  cacacatcta caactatctg atctttgaca aacctgacaa aaacaagcaa tggggaaagg
100381  attctctact taataaatgg cattgggaaa actggttagc catatgcaga aagctgaaac
100441  tagatccctt ccttccactg tatacaaaaa ttaactcaag atgggctaaa gacttaaatg
100501  taagacctaa aaccataaaa accctaaaag aaaacatagg taataccatt caggacatag
100561  gcatgggcaa agacttcatg actaaaacac aaaaagcaat ggcaacaaaa gccaaaattg
100621  acaaatggga tctaattaaa ctaaggagct tctgcacagc gaaagtaact accatcagag
100681  tgaacaggca accaacagaa tgggagaaca tttttgcaat ctatccatct aacaaagggc
100741  taatatccag aatctacaaa gaacttaaac aaatttacaa gaaaaaacaa acaattccat
100801  caaaaagtgg gtgaaggata agaaaagact cttctcaaaa gaagacattt atgcagtcaa
100861  caagcatagg aaaaaaagct catcatcact ggtcattaga gaagtgcaaa tcaaaaacac
100921  aatgagatac catttcatgc cagttagaat ggccatcatt aaaaagtcaa gaaacaacag
100981  atactagaga gcatgtggag aaataggacc acttttacac tgttggtggg agtggaaatt
101041  agttcaacca ttgtggaaga cagtgtggta ttcctcatct tcaccacggg gtggaggtac
101101  gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
101161  nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nagaaacata gaccctgccc
101221  aacgcatatt cctgaaaggg atggcaaggt tttttaaag gttttatggg tttaggtgta
101281  ctctaaagga ttttaaccct tctaaaatta tttttgtata aaggtgtaag aaagggatcc
101341  aacttcactc ttttacaaat gggaagccag tttttcccgg cccctttttt taaaaaggat
101401  tcccttccc attggttgtt tttttcaagg ttgtcaaaga tcagaaggtt gtagatgtgg
101461  gttggtaatt tttaggggtt tgttttggtc ccattggtcc ataggtcggt tgtggtacca
101521  gggccatgtt gtttggtta ctgtaagcct cgtagtatgg tttgaagtca ggtagcatga
101581  tgcctccagc tctgttcttt tggcttagga ttgtcttggc aatgcgggct cttttttggg
101641  ttccatatga actttaaagt agtttttccc aattctgtgc agaaagtcat tggtagtttg
101701  atggggatgg cattgatcta taaattacct tgggagtatg gccattttca tgatattgat
101761  tcttcctatc catgagcatg gaatgttctt ccatttgttt gtgtcctctt ttattttgtt
101821  gagcagtggt ttgtagttct ccttgaagag gtccttcaca tcccttgtaa gttggattcc
101881  taggtatttt attctctttg aagcaattgt gaatgggagt tcactcatga tttggctgtc
101941  tgtctgttat tggtatataa gaatgcttgt gattttgca cattgatttt gtatcctgag
102001  actttgctga agttccttat cagcttaagg agattttggg ctgagacgat ggggttttct
102061  agatataaaa tcatgtcatc tacaaacagg acaatttga cttcctcttt tcctaattga
102121  atacccttta tttccttctc ctgcctgatt gccctggcca gaacttccaa cactatgttg
102181  aataggagtg gtgagagagg gcatccctgt cttgtgccag ttttcaaagg gaatgcttcc
102241  agttttgct ccttcagtat gatattggct gtgggtctgt cataaatagc tcttattatt
```

FIGURE 2 (cont.'d)

```
102301 ttgagataca tcccatcaat acctaattta ttgagagttt tcagcatgaa tggttgttga
102361 attttgtcaa aggccttttc tgcatctatt gagataatca tgtgtttttt gtcattggtt
102421 ctgtttatat gctagattac atttattgat ttgcgtatgt tgaaccagcc ttccatccca
102481 gggatgaagc ccacttgatc atggtggata agctttctga tgtactgctg gattcggttt
102541 gccagtattt tattgaggat tttcgcattg atgttcatca gggatattgg tctaaaattc
102601 tctttgtttg ttgtgtgtct gccaggcttt ggtatcggga tgatgctggc ctcatataat
102661 gagttaggga ggattccctc tttttctatt gattggaata gtttcgccaa actgacatga
102721 tttttaaaat tccctatagg gtcaatgtgc agatttaaag atccctacac tcagtagtcc
102781 tgggataggg tcgggggatc catatgttta acaagcagcc tagagtctcc cgatagcctg
102841 ggcaagcttt aaaaagccct gcggacattc ggatgaaaca aaggtgcaca gaacctatat
102901 ctctgccatt tattagctgg gggccttagg caaggaaggt agtcaacctc cgtattcctc
102961 agttcctcaa ctgtaaaatg gggatgatga ctgtggctcc ctcgtggggt tgtgacggag
103021 gaacagggga catatgtcct gggatcagca ctggcaattt ggccattctt accatagcac
103081 ctgccatctt ggtgacagcc tggacacaaa gccttcacac ctttgaagtg gccatagaga
103141 gcatgagata tggatgggga ggaggcattc caactaaaga cccctgcttt gggccaaaaa
103201 cacatgtatg tctggtgtct ggagtcctct ggttatgcct tttttaagat accggttgtc
103261 ctgcaattgt gcgttgagaa tccactctat ggccaacata tcatcaaagc gtttggctca
103321 gctaggctgt tcccccaacc caaggacccc atgaggaaag gagtgagggt tccaccccca
103381 gcaccagcca ctggaggggc tgcccagagt ccctcagttc tcgtaaactt acgctttgga
103441 gtaattcaga acaaagtcca ctcctttttc actatcaaac tggatatcac ggggtaaatc
103501 cttgtggcat ttggcatcga tgctcaaggg gaagccaggg ttccactcca tccatctgag
103561 catgagaaag gagaagaaat tgagttaaat gccagccttt ggtctgcccc ctcagctgag
103621 ggccgcccac actgtcagac gatgttacac agggagattg atgtactcaa aataaagtca
103681 acacatcata ggctgaccct gtgtccagta aggttctggg acctcttcca aagtccagtc
103741 gcaccaactt tgctgtgccc tgagcatcag agtgggaacc ctgagactgg gcttatagtg
103801 gtacaggtgt gcaccactgc ataaaaagtt ctgtaggtag tctagggaga cctcacttac
103861 tagaggtgac attgaacagt agaggcctgc cttgccagtc actggaggta gaaggtatta
103921 aggctgccca gccacgccca acctggacat ccaccattct gccaacttga tcagtgtgtg
103981 ccctggactg cgtgcatgtc ctgcatgtgg catttgggga aatgggacag ttcttctgcc
104041 ttcacaatag gacgacacgg cagcaggtgg cctgggagag ggacccaggc acagatggct
104101 aaaaggcttc cctctctcac ctgctggcca atagcagctt tagagattat tacaatcaaa
104161 acagcttccc caaagacaag ccacggactg catccagtaa acatgctcag atcctgacat
104221 ccttgaaacg tatcccgtgg cattgggcat ttgtgttttt gaaaaatgtt tattttgctt
104281 ttttgtttac ttattgagta aacttaaatt gtgaaaatgt cagaggtgtt tgaaccacag
104341 caactccatc ttgaataggg gctgggtaaa ataaggctga gacctactgg gcagcattcc
104401 caggaggtta ggcattctaa gtcacaggat gagacaggac attgatgcaa gatacagggc
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104521 taagatggtg atgaaagtga cctctgttca tcctcaccac tcattatatg ctaattataa
104581 tgcattagca tgctaaaaga aactcccacc agtgccatga cagtttacaa atgccatagt
104641 aatgtcagga agttacccta tatggtctaa aaaagggagg aaccttcagt tcctggaatt
104701 gcccacccct ctcctggaaa actcatgaat aatccactca ttgtttagca catgatcacg
104761 aagtgactgt aagtatgctc agtcgagtag cccatgctac tgccttgcct atggagtagc
104821 ctttctttat tgctttactt tcctaataaa cttgctttca ctttatggat tcaccctgaa
104881 ttctttcctg tggaggtcca agaactctct cttggggtct ggatcaggac ccctttctgg
104941 taacaaaaac aaaatgaaat cctgttagtt tctttgggga gggagaatga ttttgtgttt
105001 gtttaaaaac cagattttac attttagggt tttagctttt tcatttatat tcctaattct
105061 ccttcctttt aaaattttct tttgagagga aagtaaaata tcgagatttt gggtcttaaa
105121 aaagtcctga gttattttaa tatgatcttg tgctttgact ttccccaaat cccaactgtc
105181 acagtgtcct cttggcccag tagcctctcc ttaggatcac aagaagtgaa cagggaccgg
105241 gtatgatcct tctgacagca aaggcatttt gtcaagtgtt ttctgttatg tggcacctta
105301 catttctcac tgttggttta tttagaatat tctacgtcct cagattttaa gaaaaccttc
105361 catttttgct gtttgtatta atgccaatga tagtatatta acaaggataa aaatgtggac
105421 aagtctacac attttttgtt tgtttgtttt ggaaaatgac tcaaggcatc tccaatatat
105481 atctaaaatt gagccattca gtagcctcac tggtagtaat gatcaattaa ttagctatca
105541 ttagtcatat caatttaaat attactgatg attttctctt tgcctggaca gttcaagggc
```

FIGURE 2 (cont.'d)

```
105601 tctagttaat tttaaaagct cagtggagct agatgttttt cagtatgtaa acaatgagcc
105661 atgcaagggc atctgtgcca gcaaatggca ttaatgtttt cttaagtgaa tagtccactt
105721 ggacggatgt ggaatacttc ttcagcacca aaaagacctt cttgccccat gccctgccct
105781 ggtctatgga gggtggcagc accaatgggc agaaatgccc cacttgtgtg gttagaagat
105841 gatggcctca cagcacatgg agacaggaca gcttgcttgc tagttcacta ctgcccccct
105901 gaaaccaaat gtttatgtcc cttccactgc aggtcactgc tgcttaagag accctgacag
105961 gctgacctgc acaggagccg aaggcctgca tggccacaga cattaactgg tggagatgga
106021 atcccactcc attgaggaag accaagtgga cacccaggc agaaggaaca aagaagtaga
106081 aaggcattta atttattgga aaaaaaatga gagagagaga gaaagagaga gagagaaagc
106141 aagagagaca gagagacaga gagagagaga gagagaaaga gagagagaga aagcaagaga
106201 gacagagaga cagagagaga gagagagaga gagagacaga cagacagaga gatcctaagg
106261 ggatgcagtt agtataattg gagtgtaaaa agactttctg taaccacaaa catgatttct
106321 gaatgaagac ttcaatagag aaacagacaa agagaataat cactgtgaga tgtttggtct
106381 cttgtattaa aagaaaagct ttagacaaat taaatttagc agtttaattg agcaaagaac
106441 aattcaagaa tagggcagcc cctaaaccag agcaggctcc gagtgacttt gatgctgtct
106501 catagttgga taggatttat gggcagaaaa aggaacgtga tgtacagaaa atggaagtga
106561 ggtacagaaa cagccagatt ggtgatggct cagcatttgc cttacttgag cccagtttga
106621 acagctggcc actgtgagtg gctgaagtct ggccgctgtg attggctgag acttggttac
106681 ttgctatgag agtaggtgac agtctgttta cacatccagt taggttacag ttcactatgt
106741 acagagaaac tttttaggctg aatttaaaat atgtaaggag aaaagtttaa gctaaactca
106801 ttaacaccta gaagagagaa ggtgttcatt cgacaactaa ttatggagca cctactatgt
106861 gccaggaagt gctttgtgca aaatagaaga acatgtaacc caaatacagg gtgaaactac
106921 aaagaaatgg aagccataaa tgaaactatg agagacataa accaaaaata aaattctaag
106981 cccctgaact gactgatgga ccctcccctt ggccaagggc attccaaagt taacctgaaa
107041 aattagttca ggccatgata ggaatgggtg gctaaacgtg cctcattgta ctctcctcct
107101 cttggaattc aggcacaact gatcagcatt cacatcaaca cagagatgtt aagcccatta
107161 gaacagactc tttaagattg ataagaaaca tttacaattg attctacctg aagcctgcta
107221 cctggaggct tcatctgcat gataaaaaac tttgtttcca caacccctta tcttaaccta
107281 gacattccaa gttttttagat aataattctt ttaagcagtt gccaatcaga aactctttga
107341 atctgcctat gacctggaag ctcccctccc ccaagttgtc ccacctttcc aaaaccaaac
107401 cactgtccat cttacatgta ttgactgatg tcttatgtct ccctaaaatg cacaaaagca
107461 agctgtaccc caaccacctt gggtgcatgt tctcaggatc tcctggggct gcatcatggg
107521 ccactggtca ctcatatttg gctcagaata agtcttttca aatatttcac agagtgtgac
107581 tcttttcatt aacagacatg aaagccagat acagatgtaa tatgcaagga gtaaaagctc
107641 caaaaggaga gagagtaata tatggagaag tgaaaaaaat caaagaaata aaagaagaac
107701 tcctttaagc tgaaaaatac ttcaatatct taagtctgtg aaaggaaatt aaattttagg
107761 accccaaact catttagcca aagggaaatg tcaagctggg aactgtgtca tgcaaacctg
107821 cctcccctt ttggttccta aataagatgg ctatgatgaa aagctacatg tctccaccat
107881 attttgctca caaggaaatt cctagtgaac cgttaaaatt tcaccatggc aatgcaaatt
107941 gatagcttat cttttacaagt gcagtcaccc accagataca aatgcatatc tgattgttcc
108001 cctgccttac tttatctatg ttctcttatg taaaatgcag actccctgca ttttttcctct
108061 gcctcatttg tttatgtcat cttatgttaa aaaaaatgca gattcactga gccagagaaa
108121 ggcatgaata actattttc cctgccctgc tcttacatga aaattgtgta cttctcaata
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108241 gctgtctccc gggcatgcgt ccttaacttt cgcaaataaa tttcctaaaa tgattgagac
108301 ttgtctcgtc atttttctca atgacaagtc ctaggtgggg gggaaaaaaa aaaaggaaaa
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108421 gacagagaga aggaaagaga tgcagagagt gaacgagaga ggaagaaagt gggggaggga
108481 gggagataga aactctagga aaagaaacaa actatcatta gatttctcct ctgtcattct
108541 gaaaatggga agactgaagt gtatacacac ttttttttaga tcgtcatcta agcctctcat
108601 attgtcatca atgagggcag gggaatttgt ttgaggggat gggtagggg acaggacgac
108661 aagcacagac tcagatctta cactacacat ggaccttctg aggaaattaa ttgaacaagt
108721 tcagctgaac aaaaattaaa ttagaatgaa tcaataaact cctaaataca gcaaagaata
108781 tgcattataa aactacagca aatataatag taaacaaaga aacaaaaata tgagagggat
108841 gttcatcact actaccacta cttgtttttgg gaattccaga catggaataa gaaaagaata
```

FIGURE 2 (cont.'d)

```
108901 tcagtggtgt agataatgga aagtaagaga caaaattatt aacatttaga taatatgagc
108961 acattaacta accagactca ctaacaacaa acaaacaaaa acaagtgatt agaaccaatg
109021 aaagaattca gtaagggacc aacacacagt aaatgtaaga aacaagtaat ttacatttat
109081 cccagcaata tttttgcaaa cagaaaaata tcctactcag aacagcaaat gctaaatgta
109141 gagtagctag aaaggtgaag gacctgcatg aagaaaacta gaaattctat ggaagtacgt
109201 tgacacagga tctagagagg tggaaagaca cgctgtgttc ctggatggaa agactgaatc
109261 tcagtaaaat gccaacacat aacacagtta tgtgaagttc aaagtaattc tcattatgaa
109321 aaacttaaga aagaacagtg agatatgtaa cagacattaa catttattag aaagttatga
109381 taaccaaaag ctggtgctgg ggtctcgagt agaaaaatag gctaacacat aaagtgcgga
109441 aacagaccca gagactatgt atacataata caaaactcgc caacacttat ccagtgcttt
109501 ctatgtgcct actactattc tctgtgtttt catggtttaa cctattatct caaaccccta
109561 aaaggaaggc actgttattt ccctcatttt acagatgagg gaagtgaggc acagacagat
109621 taaacaactt tcacaggact ggagaaagtg ccagtaagtg tgagttgagc ccagacactc
109681 gaatccagag ctcatgactg ccatcctatg ccagcttgta ccgtgggtat catcatccct
109741 gtcatccaag tcaggaggaa agacatcatc cctgtcatcc aagtcaggaa cgaatgctac
109801 cgggagagtt ccacccaggt atgtatgaaa acacgtggca ggagtggggc atggtggcgc
109861 acgcctgtag ccccagctac ttgggaggct gacgtgggaa gatggattga gcctgggtta
109921 gtttgaggca gcagtgaacc atgatcatgc cactgcactc cagcctagga aacagagcaa
109981 gactctgtct caaaaaaaaa aaaaaaggta gatgaatgaa agctctaaac tcaaagggga
110041 aattataaaa gtattagaca aaattacggg ggaagtattt gtgtaacact gggatggaaa
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110281 gaaagaacaa tagggaaaaa aagcttataa ataggcaatg cagtgatgct tattagtggt
110341 caggggagtg cagactaaaa caaccacaag gtcttaggga ttttttagact gtcaaacaag
110401 gtcatcgggt actgacaaat gtatggatgg gcaaaagtat cttttcatac acagctggta
110461 ggaccgcaaa ttacgataca attttgtgaa aggatttttg tcggtatttc ttaagatgaa
110521 aaaatgctga tttgttccag caatctgagt tctggaaatg gatctgccat taattaaagc
110581 accagtacat caagatgttt gtacaaggtt ggttctggca gcattgtttg tactgcaata
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110701 atggctaagt aaattatggt gcattcccag aaggcaagaa atagtagcag tttaagaagg
110761 ggaaaatata tgagatacta tttcacacgc aagaatgaaa acatctgaag atgcgaagtg
110821 ttgatgatgc agggaaacag tgaatctcag aaacagttac tggggtgtct actggcagaa
110881 tgcctttgga aaacaatcag caatatctag aaagcttaaa aacacgtggt ctgcaaccct
110941 gcaactctac ttcttggaat attccctaca gtaactcttc catgagagca cagagagatg
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111061 cccatcagca ggagagcgga cgagcgcatg ggttattcag atactgatat gccatgaaga
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112081 taatggcatg taagtttttat ttttgatttt tcaattggga aatagaatat ataaatatg
112141 tatggatatg tatatatgca cacacacact cacacatgca gaaaaatgta caaaacacct
```

FIGURE 2 (cont.'d)

```
112201 gtacgaacac catccaggta aaaaatcaga acattgtccg taccctcacc cccacctttc
112261 ccaatcaacc ctccttccat ccccggtaat gaccatcctc ggctttatga taatcatttt
112321 cttgttattg tttaaggttc cgctatgaca cacctcccta aacaatttca ttccaaagtt
112381 atgaattggc cagacacgct cctggcttct ttccttcaac actgcgtcag tgaggtttgt
112441 ccatgttagc agcagtttgt tgattttcct tgcagtgtag aattttcctt gacaatttgt
112501 ctgttctact gtttgttgga cattgagttg ttgccatttt ttggccatca tgagtaatgc
112561 tgttgtgagt atccaggcgc acatgcacac aaatttggat cccactatag gatttctggg
112621 tcatagatta taatgtagct tcagttttat gacatattgc taaattgttt tccacggagg
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112741 ttaatactca ggtgttgtca gttgttgaag tgttgcccat ctggggcat atgtgtggta
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112921 gtgaatgaca ctccccttct taaagatttg taggtccttc acatactagg aataattctc
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113401 tttgatgaaa aggggggatga agctaagaca gttttgaggt ggggcaattg tgttcttggt
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113581 tatggcaagt gtttgatgaa acagggaccc atacatggct cgtgaaaact ggttaaagat
113641 tttttttttt tttttttttg agacggagtc tcgctctgtc gcccaggctg gagtgcagtg
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113761 cctcccgagc agctgggact acaggcgccc gccaccacgc ccggctaatt ttttgtattt
113821 tttagtagag acggggtttc accgtgttag ccaggatggt ctcgatctcc tgacctggtg
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113941 tactaataac ttttactatt tggtaatttc atatctgggc atctgtccta ggaaaatact
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114061 ttagaaacct cctaaatgtc cagggaagct gggtgtttaa gtgaatgatg aggcatccat
114121 ccaatggaat agtacataga aactagaata atgtttatga tgagattttg aaaatatggg
114181 aaaatgattt ttgctacact gctaaagggc agcaaggagg atgcaaagtg gtatatatag
114241 cacaatccca aattttaaaa agtgaataag acaaagtgaa aacaattaaa catgaatttt
114301 tatgaaaaag ttcataaaat tcataattca tacagaaaat aggtattttt ctggctctat
114361 attattttcc ttcttttact tttttgagtt aaaaaaacaa cccagatata ctacatattc
114421 cttgtaagaa gttcaactat tgagggatat gtagaaagt atcacaatat tggctcccaa
114481 aggcccctcc acagcccagg taacttcact gtccatgtag aatgattcct tccactttct
114541 tcccttggaa ggaggcacag actcaaatgt ttccaggggc caaagcagga aatgaaatga
114601 aagaaaacct tgatatagac aacagacaag tgtggactgg ggaagcctga agaatatctc
114661 tgtttactca taagtcaata atgatccatc aaacacttgt agaggctgga tacagcccat
114721 cagccaccca tttccagagg agcactctgt aatgtgttat tatcttccaa aaagctttac
114781 tgagatacat ttacatacca ttaaattcac cccttaaaaa tatgctatca aaagatttta
114841 atatatttgc agagttgtat gtgtaaccat cattataacc caattctgaa ataatctcat
114901 ccccagagga cacctcgaac ccattaacat tcactccttg tttcccctcc ccaactccta
114961 gtgctaggca actactcacc tactaacctg actctgtggg tttgcctatt ctggacattt
115021 catacagata gaatcacaca atatgggtc ttccgtaagt gagttttcca tttagcatat
115081 ttttgaagtt cattcagtgt ttggcatcta tctgtagttc atttcttttc ttttcttttc
115141 tttttttgaa atggagtctt gctctgtcac ccaggctgga gtgcagtggc gggatctagg
115201 ctcactgcaa cctccgcctc ccgggttcaa gtgattctcc tgccttagcc tcccaagcag
115261 ctgggattac aggcgtgcac caacatgccc ggctaatttt tgtattttttg tagacatggg
115321 gtttcaccat gttggccagg ttggtctcaa actcctgacc tcaagtgatc tgcccgtctc
115381 aacctcccaa agtgctagga ttacaggtgt gagcctccgc gcttggcatt cattccttttt
115441 tgatgccaaa aaatatccca ttgtatggat aaactatatt ttgtttattc attcctcagt
```

FIGURE 2 (cont.'d)

```
115501 taatggaatt taggttgttt ctactttttg actattgtga acaatggtgc tataaatatg
115561 tgtgtacaag ttttgtatag acatgtggtt tcaatattct tgggtagagg cctaggagta
115621 gaattgctgg gtcatattgt agctgggttt cagattttga ggaaccacta aactgttttc
115681 tgaagtggct gcatcatctt acattccggt agcagcatca gggttccagt ttctccacat
115741 ccttggcagc acttgttact atctgtcttt tttattctaa ccattttagt ggttagaatt
115801 gtatcttgtg gtttttgattt gaaatttcct gatgattaat aatgttgagc atattttcac
115861 gtgcttattg gagattcaca aattttctct ggagaactat ttaattaaat cctttgctaa
115921 tttttaaacg gggtttttttg tacagaatat tttaaaattg agttgtcaga gttctttata
115981 tattctggat acaagtccct tatcagacat atgatttaga tattttctcc attctgtgga
116041 ttgtctttttc actttattga tgatgtcctt tgaagcatag atcttttaca ttttaatgac
116101 atctaacttg tctactttct tttgctgcct gtgctcttgg tgccatatct aagagacttt
116161 gccgaaccca agattatgaa gacttacttg tatgttttct tccaagagtg ttatgttgtt
116221 agcccttact tttagatcta tcatccattt tgaattaatt tttaaattta tctagcagcg
116281 ttattgaaat ataatgcaca tactgtaaaa tttatccatt taaagtgttc aattcaagga
116341 tgtttagtat taatttttac acaatggaca accatcagtt ttagaacatt ttcatccccg
116401 gcaaaaggaa cactgtatcc tttagctgtc actcccatga ccacttcctc attccctgcc
116461 cctaggcaac cagtaatcta ctttatatct gtacagattt ttctttttcca gaaatttcat
116521 ataaaaggaa tcatacaata tatgatcttt tgtgactggt ttctttcact tagcataatg
116581 tttttgagat tcatccatgt tgtaacaagt gtcagtattt cattcttctt tcatggtcaa
116641 attatataga tatactatat tttatccatt catccattaa tggacgtttg ggttgtgtac
116701 acttttttgat agttacaggt catgctgcta taatcatgca tgtacaagtt tttgtgtggg
116761 catatgtttc catttctgtt gggaatatgc ttaagagtgg aaatgctgtc atattgtaac
116821 tctctgttga acagtcagga gctagcagac tgtttcccaa gcagctgtgc cattttacat
116881 tcccaccagc agtgtatgag ggttctgatt tctccacatc cttgtcaaca cttgttcttg
116941 tcggattttt ttattctagc catcctagta tcaagtggta tctcattgtg gtgttgattt
117001 gcatttccta gatgactaat gggtccttgg agaaatatct attcagatcc tcactcattt
117061 ttttcatttt ttaattggac tatttgtctt tattgagttg taagagttct ttataaatta
117121 tggatggaag gcccttatca gatatacaat ttgtaaatat ttcttccatt ctgtggttca
117181 tcttttcact ttcttgatgg tgtcctttga aacataaagg tttgtaaatt tgatgacatc
117241 actttatcac tttatctatt tttcttttgt tgctgatgct tttggtgtca tatcaagagt
117301 cctttgtcaa atccaaagtc atgaaggttt actcctgtgt tttcttaaaa gagtttttata
117361 gttttagctc ttacatttag gtaggtattt gactcatttt gtgttaattt atgtatatgg
117421 tgtgagctaa ggatccaact tcattctttt gcatgtggct atccagtttt gctaggacca
117481 tttgttgaaa agactattct ttctctgtta aactgtcttg ctgcttctgt caaaaattaa
117541 ttggccataa gtgtaagggc ttatttctgg actctcaagt ctatttcatt gatctatata
117601 tctatcctta tgccgatatc acattgtctt gaatactata gctgtgtagt aattttgata
117661 ttgagaagtg caagtcctcc atctttgttt tcttttttatc aagattgttt tggctattct
117721 gggtcccttc catttccata tgaatttgca gaattgacag cttgtcaatt tctgcaaaga
117781 aatcagctag aattttgata agggttgtgt tgaacgtgta cattaatttg tggggtattg
117841 ccattttaac aaaattaagt cctctgattc atgaacatga aatgtctttc aacctattta
117901 gatcttcttt aataatgtta aacaatgttt tgtagtttca ttgtacaagt ctcagactac
117961 tttgttaaat ttattcataa atgtttactg tttttgatgc tattgtaaat tgaactttttt
118021 cttactttta tttcacatag ttggttgtta atgtatagaa aaacaattga ttatcttgta
118081 tcttgcaatc ttggtggttt attagttcta ataatttctt ttggtgaatg ccttcagatt
118141 ttctatatat aagatcatgt tatttgtaaa ttgtggtagt tttacttact gtactccatt
118201 gtgggtgcct ttacttatct ttttattccc taactgagct ggctagaccc tccagtacaa
118261 tgttgaatag aagtagcaaa agtgaacatc tttatcctgt ttctggattc agcctttcat
118321 cattaagtat aatgttaact gtgaatttttc ttttttttgtg tatgtggggg gacggagtct
118381 tgcttgtcac catgctggag tgcagtggca tgatctcagc tcactgcaac ctccgccttc
118441 tgggttcaag tgattctcct gcctcagcct cctgagtagc tgggactaca ggcgcatgcc
118501 accacacaca gctacttttt gtattttagt atagacgggg tttcaccatg ttggccagga
118561 tggtctcaat ctcttgacat cgtgatccac ccgccttggc ctcccaaagt gctgggatta
118621 caggtgtgaa ccaccacgcc cagcctaatt gtgaattttc aaacctttat caggttgagg
118681 acattttctt caattcctat ttttttgagtg ttttatcatg aatgggtgtt ggattttgtc
118741 aaatgccttt tttgtatgtc tattgaaatg attatgtact ttgttttgtt ttgttatttta
```

FIGURE 2 (cont.'d)

```
118801 ctctattgat atggtgaatt caattaattg atttttggat gttaaaccaa ctttgcattc
118861 ctgggctaaa tcccacatgt tcatattgtt taatgccttt tatatacttc tgggttaggt
118921 ttgctagtat ttcgttgaaa atgtttatat ctatattgct aagggatatt ggtttatagt
118981 tttcttgtga tgcctttagt tttggtataa tatgggtatg agacaatgaa ttgggaagtg
119041 ttccttctat ttcttaaaag agtttatgca agatcagtat taattcttta aatgtttgat
119101 agaattagcc agtgaagcta tctgggtctg ggcttctatt tgtgggaaat tttagaatta
119161 gtaattcaat ctctttggtt gtgattgttt tattcagatt aactatttct tcatgagtca
119221 gtttttggcag tttgcgtctt tctaggaatt tgcgcatttc atttaactag tttgttggca
119281 tgcaattgtt catagtattc ttttttatta attttaattt ctgtattgat tttccctcat
119341 tttatgagtc tcatttttcc ttttttattc attttaattt ctgtattgat tttctcttat
119401 tgctcatttt aatggtttga atcctctggt cagttggctg aagagttgtc aattttattg
119461 ctgatcatgt atcactttta taattgaatt gttataagaa gacataagaa gtaagaggca
119521 acccctacaa tggagaacat taaggtacac tcaagctttt ctgcccattc ttcctacatg
119581 ccaatatggt tgatccaaag ttattttcat tactctcctc tccatctctt gtctggagtt
119641 gtaggtaagg tgaagtttgg ggattgtgca cccacactgg gagctggtgc cttggtgact
119701 ttccagcagt gacaggccat acactgtgga aagggtttat ttcataccat gctcttgaga
119761 tagaagaaac catggccccg tggccactcg atctgatgtc ataactcacc gatattgttt
119821 ttgccgtgtt tccagttctt tacgtcggtg ttgcttgaga atgtgaattt ggtcatctcg
119881 ggccaacttt gctgtaaaga aagaacaaca tgagaggagc ctgaggaaga acaataacaa
119941 tgcccaatgc caagtgttca ggcttccctc agatgccctg cccatgccga gtgctttatg
120001 tgcatgacct catttgagcc tcagagcact tccccaatta atgatgaaga aactgaggct
120061 tagggaagtt gtgtagcttt gctcttgaac tttacccaag gtcacacacc taattagtga
120121 attttctttt tttttttta attctacttt aagttctagg atacatgtgc acaacgtgca
120181 ggtttgttac atatgtatac atgtgtcatg ttggtgtgct gcacccatta actcgtcatt
120241 tacattagtt atatctccta atgctatccc tcccccttac ccccacccca tgacagacct
120301 tggtgtgtga tgttcccctt cctgtgtcca agtgttctca ttgttcaatt cccacctatg
120361 agtgagaaca tgtagtgttt gtttttttgt ccttgcgata gtttgctgag aagggtgatt
120421 tccagcttca tccatgtccc tacaaaggac atgaattcat ccttttttat ggctgcatag
120481 tattccatgg tgtatatgtg ccacattttc ttaattcagt ctatcattga tggacatttg
120541 ggttggttcc aagtctttgc tattgtgaat agtgctgcaa taaacatacg tgtgcatgtg
120601 tctttatagc agcatgattt ataatccttt gggtatatac ccagtaatgg gatggctggg
120661 tcaaatggta tttctagttc tagatccctg aggaattgcc acagtgtctt ccacaaaggt
120721 tgaactagtt tacagtccca ccaacagtat aaaagtgttc ccatttctcc acaccctctc
120781 cagcacctgt tgtttcctga ctttttaatg attgccattg taactggtgt gagatggtat
120841 atcattatgg ttttgatttg catttctctg atggccagtg atgatgagca tttttttcatg
120901 tgtctgttgg ctgcataaac gtcttctttt gagaagtgtc tgttcatatc cttcgcccac
120961 ttttttgatgg ggttgtttgt tttttttcttg taaatttgtt tgagttgttt gtagattctg
121021 gatattagcc ctttgtcaga tgagtagatt gcaaaatttt tttcccattc tgtaggttgc
121081 ctgttcactc tgatggtagt ttcttttgct gtgcagaagc tctttagttt aattagatcc
121141 catttgtcca ttttggcttt tgttgccatt gcttttggtg ttttagacat gaagtccttg
121201 cccatgctta tgtcctgaat ggtattgcct aggttttcct ctaggttttt gatggtttta
121261 ggtctaacat ttaagtcttt aatccacctt gaattaattt ttgtataagg tgtaaggaag
121321 ggatccagct tcagctgtct acctatggct agccagtttt cccagcacca tttattaaat
121381 agggaatcct ttccccattg cttgtttttg tcaggtttgt caaagatcag atggttgtag
121441 atgtgtggtg tcatttctga gggctctgtt ctgttccatt ggtctatatc tctgttttgg
121501 taccagtacc atgctgtttt ggttactgta gccttgtagt atagtttgaa gtcaggtagc
121561 atgatgcctc cagctttgtt cttttggctt aggattgtct ggcaatgcg ggctcttttt
121621 tggttccata tgaactttaa cgtagatttt tccaattctg agaagaaagt cattggtagt
121681 ttgatgggga tgacattgaa tctataaatt accttgggag tatggccatt tttatgatat
121741 tcattcttcc tatccatgag catgggatgt tcttccattt gtttgtgtct tcctttattt
121801 cgttgagcag tgatttgtag ttctccttga agaggtcctt cacatccctt gtaagttgga
121861 ttcttaggta ttttattctc tttgtagcaa ttgtgaatgg gagttcactc ctgatttggc
121921 tctctgtttg tctgttattg gtgtataaga atgcttgtga ttcttgcaca ttgattttgt
121981 atcctgagac tttgctgaag ttgcctatca gctttaagga gatttttgggc tgagacaatg
122041 gggttttcta aatatacaat catgtcatct ggaaacaggg acaatttgac ttcctctttt
```

FIGURE 2 (cont.'d)

```
122101 cctaattaaa taccctttat ttctttctcc tgcctgattg ccctggccag aacttccaac
122161 actatgttga ataggagtgg tgagagaggg catccctgtc ttgtgccagt tttcaaaggg
122221 aatgcttcca gttttttgccc attcagtatg atattggttg tgggtttgtc ataaatagct
122281 cttattattt tgagatacgt cccatcaata cctaatttat tgagagtttt tagcatgaat
122341 ggttgttgaa ttttgtcaaa ggccttttct gcatctattg agataatcat gtggtttttg
122401 tctttggttc tgtttatatg ctggattaca tttattgatt tgtgtatgtt gaaccagctt
122461 tgcatcccag ggatgatgcc cacttgatcc tggtggataa gcttttttgat gtgctgctgg
122521 attcggtttg ccagtatttt attgaggatt tttgcatcga tgttcatcag ggatattggt
122581 ctaaaattgt ttttttttgtg tgtgtatctg ccaggctttg gtatcaggat gatgctggcc
122641 tcataaaatg agttagggag gattccctct ttttctattg attggaatag tttcagaagg
122701 aatggtacca gctcctcctt gtacctctgg tagaattcgg ctgtgaatcc atctggtcct
122761 gaactttct gggttggtag gctgttaatt attgcctcaa tttcagagcc tgttattggt
122821 ctattcaggg attcaacttc ttcctggttt agtcttggga gggtgtatgt gtcgaggaat
122881 ttatccattt tttctagatt ttctagttaa tttgcttaga gttgtttata gtattctctg
122941 atggtagttt gtatttctgt ggaatccgtg gtgatgtccc ctttatcact ttttattgcg
123001 tctaattgat tcttctcttc ttttttttttt cttttttttt aattgatcat tcttgggtgt
123061 ttctcgcaga gggggatttg gcagggtcat aggacaatag tggagggaag gtcagcagat
123121 aaacaagtca acaaaggtct ctggttttcc taggcagagg accctgcggc catccgcagt
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123241 cttcaagcat ctgtttaaca aagcacatct tgcactgccc ttaatccatt taaccctgag
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123361 tcccaaggca gaagaatttt tcttagtaca gaacaaaatg aaaagtctcc catgtctacc
123421 tctttctaca cagacacagc aaccatccga tttctcaatc ttttccccac ctttcccct
123481 tttctattcc acaaaaccac cattgtcatc atggcccgtt ctcaatgagc tgttggctac
123541 acctcccaga tggggtggtg gccaggcaga ggggctcctc acttcccagt aggggtggcc
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123661 ccacctccct ctcggacggg gcggctggcc gggcggggggg ctgaacccct cccctcccgg
123721 acggggcggc tggccgggcg ggggctgac cgccccccac ctccctcccg gacagggtgg
123781 ctgccgggcg gagacgctcc tcacttccca gacggggcgg ctgccgggcg gagggggctcc
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123961 gcggccgggc agaggcgctc ctcacctccc agacagggtg gtggggcagt ggtgctcccc
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124201 aggcagagac gctcctcact tcccagacgg ggtggcggcc gggcagaggc tgcaatctcg
124261 gcactttggg aggccaaggc aggcggctgg gaggcggagg ttgtagccga gccgagatca
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124441 gcctgttcta cacagtgaat ctccgtcttt accattttat tatgttatat tagttctgcg
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124681 tcgcttatga tcgtgatgtt gtcttagttg cttgttggtc tctagtgtgt tttttgtgtt
124741 gtatcttgtt cttgcgttga gtgggttggg cgttggcccg aggctttctt ttggttctgt
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124861 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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125161 cagtgtgctt cggcctcgag accaccaact caacatcacg tccatctcat ttcgcgctac
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125281 tggggggcg tgggggggg gggcggggcg ggggagata ggacgtggaa gaggagagat
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```

FIGURE 2 (cont.'d)

```
125401  ctagcagtct  atcaattttg  ttgatccttt  caaaaaatca  gctcctggac  tcattgattt
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125641  tccctctaca  cactgcttta  aatgtgtccc  agagattctg  gtatgttgtg  tctttgttct
125701  cattggtttc  aaagaaaatc  tttatttctg  ccttcatttc  gttatgtacc  cagtagtcat
125761  tcaggtgcag  gttgttcagt  gtccatgtag  ttgagaggtt  ttgagtgagt  ttcttaatct
125821  tgagttctag  tttgattgca  ctgtggtctg  agagacagtt  tgttatggtt  tctgttcttt
125881  tacatttgct  aaggagtgct  ttacttccaa  ctatgtggtc  aatttcagaa  taggtgtgat
125941  gcagtgctga  gaagaatgta  cattctgttg  atttgggggtg  gagagttctg  tagatgtcta
126001  ttagctccgc  ttgctggaga  gctgagttca  attcctggat  atccttgtta  actttctgtc
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126121  agtctaggtc  tctttgtagg  tttttaagaa  cttgcttaat  aaatttgggt  gctcctgtat
126181  tgggtgcata  tacgtttcgg  atagttagct  cttcttgttg  aattgatccc  tttaccatta
126241  tgtaatggcc  ttctttgtct  cttttgatct  ttgttggttt  aaagtctgtt  ttatcagaga
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126841  tttctgccga  gagatcagct  gttagtctga  tgggcttccc  tttgtgggta  acctgacctt
126901  tctctctggc  tgcccttaac  atcttttcct  tcatttcaac  tttggtgaat  ctgacaatta
126961  tgtgtctcgg  agttgctctt  ctcaaggagt  atctttgtgg  tgttctctgt  atttcctgaa
127021  tttgaatgtt  ggcctgcctt  gctagggtga  gcaagttctc  ctgcataata  tcctgcagag
127081  tgttttccaa  cctggttcca  ttctcccat  cacttttcagg  tacaccaatc  agatgtagat
127141  ttggtctttt  cacatagtcc  catatttctt  ggaggcttcg  ttcatttctt  tttattcttt
127201  tttctctaaa  cttatcttct  cgcttcattt  cattcatttg  atcttcagtc  actgataccc
127261  tttcttacag  ttgatcgaat  cggctactga  agcttgtgca  ttcgtcacat  agttctcgtg
127321  ccatgttttt  cagctccatc  aggtcattta  aggacttctc  tacattggtt  attctagtta
127381  gccattcgtc  taatcttttt  tcaaggtttt  tagcttttttt  tgcgatgggt  tccaacttcc
127441  ttctttagct  gggagaagtt  tgatcatctg  aagccttctt  ctctcaactc  gtcaaagtca
127501  ttctccatcc  agctttgttc  caccactcgc  gaggagctgc  cttcctttgg  aaggggagag
127561  gcactctgat  ttgtagaatg  ttcagctttt  ctgctctgtt  tttccccatc  tttgtggttt
127621  tatttacctt  tggtctttga  tgatggtgac  gtacagatgg  ggtttttggtg  gtgtggatgt
127681  cctttctgtt  tgttagtttt  ccttctaaca  gtcaggaccc  tcagctgcag  gtttgttgat
127741  gtttgctaga  ggtccactcc  agaccctgtt  tgcccgagta  tcagcagcag  aggctgcaga
127801  acagcgaata  ttgctgaaca  gcaaatgttg  ctgcctgatt  gctcctctgg  aagctttgtc
127861  tcagaggtgt  acctggccat  gtggggtgtc  agtctgcccc  tactggaggg  tgcctcccag
127921  ttaggctact  ctggggtcag  ggagccactt  gaggggggcag  tctgtccctt  ctcagatctc
127981  aaattccatg  ttgggtgaac  cactagtcac  ttcaaagctg  tcagacaggg  acatttaagt
128041  ctgcagaggt  ttctgctgcc  ttttgttcgg  ctatgacctg  cccccagagg  tggagtctac
128101  agaggctggc  aggccttctg  agctgcgatg  ggctccaccc  agttcgagct  tgctggcaat
128161  gagcaaggct  ctgtgggcat  gggaccctcc  gagccagaca  tgggatataa  tctcctggta
128221  tgctgtttgc  taagactgtt  ggaaaagtac  agtattaggg  tgggagtgac  ccaattttcc
128281  aggtgctgtc  cgtcaccact  tcccttggct  aggaaaggga  attccctgac  tccttgcact
128341  tcccaggtga  ggtgatgctc  acactcaatg  ggctgccccc  actgttctgc  ccccactgtc
128401  caacaatccc  cagtgagatg  aacccagtgc  ctcagttgga  aatgcagaaa  tcacccatct
128461  tctgcattgc  tcatgttggg  agctgtagac  tggagctgtt  cctattcggc  catcttggaa
128521  ccagtctgaa  ttagtgaatt  ttcaacataa  aactcaactc  ctgtgctctt  agccactcac
128581  tttacaaaag  ccaaatccag  ttcctcatcc  tcttgcccac  tcactcagca  agccttgggg
128641  cccctgcctt  tcagtgctta  gagaatcatg  ttcagatgca  agagccaggc  ttggttctca
```

FIGURE 2 (cont.'d)

```
128701 ctgggcttgg caggcacagt acatgcctaa ctctggcctg cgtgtgcatt tccacttgag
128761 gtcctaacct tccactcagc ccctcaagac tcttcaggga cctaagggcc cctggtgcag
128821 agctgccttt ttgctccagg agaaaggcat ttcgtggccc ttggtgggta tctttaaatc
128881 actgcagaat agtttactcc tcttctctga aattcttata ctgagcaaaa acgggagttc
128941 actctgggtt ttagtgttgc ctgtgagagc agcagttctc acagctctta tgtttctaag
129001 tccatttcat tgtttcatgg agaaatgtgt gacgatgaca caacccggtt tcctgtcgtg
129061 cctacacaga ggattgagaa tgagctccat tctaaaagag tgcagtgtcc tagatggctt
129121 tagaagagac acatgtgctt ggacttgggc tctgtcactg aagctgtgtg accaagagtt
129181 gccctgaccc cctcacatgt aaaatggaga tgataatgcc tacttctccg ggtcatggtg
129241 tgcatttggg gagagaatgc aggaaagccc tccacacggc gcctggcacg cagtaaatgc
129301 caatggatgg gaacaatgat cattatcatt atgcctatag tcatcactgg cctgagggtt
129361 ctgctcctcc ctctaagcct agctctgaga gcatcttatc tctcagcctg tcctgctgcc
129421 gtctctcact gcaggagttg gagcaggtag caggtagcta agggcggggc tgcttctcag
129481 agcctttaga gcagatgagg tcatatcatg accactcttt aaactattgc ttaaggccaa
129541 gcctgtgaac gcagcccata gagctgtgaa tagggggagc ccagatctcc tgaaaacagg
129601 tcctggaata gtttctctag ctctcgtggt aaagcattgt gttttaaaac ttacttttca
129661 acacagatta ttatattttt gtaaaatata ataaaaatta attactagaa aaatgaaatt
129721 ttaaaaaccc aaagatattc aaaatccaag tctttttttt tcttattagg tgcaaaagtc
129781 acaaaattgt tctgttaagt tgctataaaa gtttctaaaa cccctcctct gagtctttgt
129841 attttatttt gtatttattt tatttttatt tttttttaaga gacagggtct ccctctgtct
129901 cccaggctag agtgcagtgg catgatcata gctccctgca gccttgaact tcaggactca
129961 agtgattccc caacctcagc ctcctaagta gttgggacta taggcacaca ccaccacacc
130021 tggctaattt ttttttttttt tttgagacag agtcttgctc tgttgcccag gctggggtac
130081 agtggcatga tctcagctca ctgcaagctc cacttcccag gttcacgcca ttctcctgcc
130141 tcagcctccc aagtagctgg gactacagtt gcccaccacc acatccagct aattttttgt
130201 attttttagta gagacggggt tttactgtgt tagccaggat ggtctcgatc tcctgacctt
130261 gtgatccacc cgcctcggcc cctagctaat tttcaatttt ttttgtagag atggggtctc
130321 tctacattgc ccaggcttgt gacaaaatcc tagactcaaa caatcctccc gccttagcca
130381 cccaaagtgc tggaactata ggcttcaacc tctgtactga tctaattgca gacctggacg
130441 cagttagttc tcagatgaca ctcaggccac attctgagct gtccacccga cagcacttcc
130501 aggctgagac atcttcatcc ttgagcttgg aactggggtc caaaaaggaa tattaacggg
130561 atacctctgc atcctcccct ggggatgtaa agccagccag gaggggaggc ttgaggccac
130621 agaaggcaag ctgagtatta atggtgacaa taactgttat cattggctat gggggtaatt
130681 ctggaggcac tcaacattca tcatctctta tctaccttaa ggaaccagct aatctcttgg
130741 gcaccttgac tctgaggagc tggatctctt cagtttcact ggtatgaata agtcagtaca
130801 tgcggaattg caacatgcca agtttcaaaa agagaatagt tctgtctccc ctggtcccga
130861 aggtgtttga agaatttatc caatggctga tgaagttctg ggagcacagc aggatgagaa
130921 agcctggact gacggcagaa gagctcagca gggcaggttc caaggactga cacagtgcct
130981 taatgaagct gtcccttcac acagatgctc tggatctgtg gggccacagt aatggccctc
131041 tgacattcat gttcacccaa ggtgtagtgg tgaaatatta gatttaaggg gtgatcatat
131101 ggtgagtaat tgaatcactt gtaggctggc cccctcatt tccaggttgt tcaagggatt
131161 ggttgttttg ccatgtggtg gattaataat tggccacagc tggacatggt agctcatgac
131221 tgtaatccca gcactttggg aggccgagcc gggtggatca cctgaggtca ggagttccag
131281 actagcctgg ccaacatggc aaaacccttt ctctagtaaa aatacaaaaa ttagccaggc
131341 ttggtggcta cctggagcct gtaaaccaag ctccctagga ggctgaggca ggagaatcgc
131401 ttgaacctgg gaggcagagg ttgcagtggg ctgagatcgt gccactgccc tccagcttgg
131461 gcaatagagt gagactctgt cccaaaataa taataataat aataataata ggccacaaat
131521 tctttgacat tccttccatt gagagatggg ggggtctgca tccccacccc caccccggga
131581 gtctgggtgg gctctgtgac tgcttggacc agtagaatat gatggaagtt acagtgtgcc
131641 agtttccagg cccaagcctg aagagattgg cagcttccac tttctgtctc ttagaaaact
131701 tgctcttgga agccagccat catgtaagaa atgcaggcac ccagaggaca ccattctgtg
131761 agaagcctta aagaatgaga ctccatatgg acagagaggc caaggagcct agaggtgcca
131821 gacacatgac agaagaaggc ccagccccct tcagctgatg ctacatggcc acagatgaac
131881 tgcccagtga agcctttcct aaattcctga cctgcaagag catgaacaaa attaaatggc
131941 tgtttaaagt taccaaggag gttggtttta cagcagtaga gagaatggaa cttgctggac
```

FIGURE 2 (cont.'d)

```
132001 agcttctcta tgctcaccct ccaacctgtg ctgtccctga aagtgattgg aatgagatgc
132061 ctcaatgggt tttccactgg gaactctgac cagaaaggag ggaatgtgta gaggaaggag
132121 aggccaatca ctccccagaa cctttctact gagggccgca gctcctccaa gggtgctgtc
132181 tccaggatac ttctgcatta ctcccacaac cttccccctc cccctgcatc aggactagtg
132241 gtgctgatgg ccccgcactc tgcatggtcc ctctgcacat gggcccacac ctttgtgatg
132301 cccctttgtt aaaccctcat cctagtgtac catctgtttt ttgccaagat gagctgaagg
132361 gtctgcagga agaagggctt cataaccgag accttgggta gatgtgcagg agggagtttc
132421 agagccagca ttttctaact accagaaaaa gagaagtgcc ctgtccacaa ccttccacat
132481 tctgttgacc acaggaataa atgaactttg tgattttttt tcctgtcatt aggtaggggg
132541 acaaaaatcc tcttaactcc atgttcagaa atattctgga aatttggttt cttaagtcaa
132601 attccacatc agaaacgatg ggatgtggcc tggtagctta agaacagcag gtacagaata
132661 acttttttct cctttgtctc agttttctta gctataaaat gggggtaaca gtcatctctt
132721 cctacctacc ccaccaaact tcgtgaagaa cacactagct acaggaaact tggcaaagag
132781 aaagagtttg acgctgtcat ggcagaagca gtggctttct cttattacgg tggctgcctg
132841 gcctttgaag gcttatcttt ccaggtttaa actgagagca agctgaaggg ttatgactcg
132901 aagtgaggta ggattttgcc aggcacacta ggaggctggg tatgcaaggt ggttcattca
132961 gggagccttg gctgaccttg acgcctgcgt ccgtctctga tgctctgtac caggtcagct
133021 gtgtgtccct aacaaagaat ggcctcctaa ctggggtctg cacatctggg catcttagta
133081 aggggaacag atttgaggtt cttctttctt tcagcgaaag gtgagacttc gggttgaaga
133141 actggtaact gtgatttgca ggcttgtcca tggctcctca gagctggcac ttgggggtgct
133201 ccttgtccac cccttccctc cctaggccca catggggcac cctgagcttg cctgagccct
133261 actgtgatct cacggagggc aggctatgaa ctagaaagtg atgccacacc ctggcaacta
133321 gagaagtgcc catccagggg catgtcccat aggtatctgc ctgtatggac cctagttacc
133381 cactgacaaa aagaggggca caaccctccc ctgtagaact gtagcgcaga gtgaggacat
133441 gacgacagtg aggcctgggg ccacccgctc caccctcagg ggcttgtaag aatcccaagg
133501 aaagtcatgc ctcctgcagg tgtgtcgagg cacagggcag agccctccca cttcccgccc
133561 ctgcacagca gtgtcattcc tcctatgact acagtgcttt gaggacagga agaactttcg
133621 gttcttggga agcccggggc agaagggggcc tgagctgctc accgcgtcca tccctcagga
133681 caacctcgac atcgccggtg atccagcggt agcagggggaa ctcgatgtag tccccgtggg
133741 gcgtcttcag cgtgatgtac ttcaggtacc agtcgtcatt cagccagtac ttgcgcttct
133801 cgattctgac cagctggatc tcgcccagtt cctcgtccac agtcacgtcg tatgaatcca
133861 cctgggaagg agaacaggca atcaggccat gcgtggtctc ctgagccttt gttctggagg
133921 tgttaagaat ttgtcacccc aaggtatgct gctgtggcac agggactacg ttgaatgaaa
133981 agcacttaaa aaaacagcag gtgcaagata ctctgacatt cgtgctgttt cttagaagca
134041 ggagatgaaa gtcccctatg aaagatgtcc tcactatacc aaaaggaaag taacactctt
134101 ttcatcaagg ttgggaagtt gaagccaaag gaaatccata caaacagatc ttgtacaatg
134161 aacgcttacc tcccgagtca cttccctgcc cagttacctg ccctagccca agccccttgg
134221 ccttatcaca tctcacgatg attcattcaa tgcagtatct aaggggggatt gactctaact
134281 gcttcttggg gtcttcatct tttttaagagg gctcccatgc cacgtacaac ttgtattaaa
134341 gaaatctgta ggctttcgcc catgaatctg tcttatgccg attctcagac ctagctgaaa
134401 tgggaagagg tggagttttg cctccactac agttcatgga gccaagattc ttcatgaaca
134461 ccttaaatga actcctgaat tcatttaccc aagacattca ctgaaggcct gcccctgaca
134521 aggctcagtg ctacgaccca ggcaggtgaa agaaatggac aaatcctggg ccctgccctt
134581 gaggagagag aatccagtga gccaggatgg tgctgtgctg ctcagagggc aacgcctgct
134641 gactgcactt agctcaggct ggaggatggg gagatgccca ggctcatgcc tgcacctgcg
134701 aggctgtgcc cagtgagggt ccgcagctgc ccccacatgg gatagccttg tgggagacct
134761 ttacaactgg agatgggctt gctgacagtg gatccccaca atgactctgg gagtgcaggg
134821 gagttaccac cccttccaca gatgaagaca gcgaggctca gtgactccca cctctgccac
134881 ttgccagcag agctggagtc acaccccagg tctttccatc atagccactt cctctctttc
134941 cagttttcag tggggataat aagtgagtga aaatggtgag cttagatac agggagcttg
135001 catggattcg agtcgtcctg ggacatttgc agttcacagc tgcatggtga tgcccagaga
135061 acagtgagac caagcagctc tgctgcacct gtggcattac tggtggcagg gtgaggctag
135121 ccttgcagct agaaggcacc accccaggct gtgtacagcg cagctgccca ggcctctggg
135181 acaaggctgc ttggccccct ccctgccagg ctcctgcttc caggacacag gcggctctga
135241 ggcaacagcc atagcttctg gagggctttt gtctctgcag caatggatgg cagacaggaa
```

FIGURE 2 (cont.'d)

```
135301 gttgggatga gaggctcagg cattgcatca cgcattctga tgaccagcag gtttggaaag
135361 ccccggactc gatgccctcc aaggcatgtt cttttttatt ttgaggtgga gtctcactgt
135421 gttgctcagg ctggagtgca gtggctcgat ctcggctcac tgcaacctcc acttccaggg
135481 ttcaagtgat tctcctgcct cagtctccca agtagctggg actacaggca cctgccacca
135541 catctggtta agttttgtat tttcagtaga gacaggggtt caccatgttg gccaggctgg
135601 tctcaaactc ctgacctcaa gtgatccacc tgcctcggtc tcccaaagtg ctgggattac
135661 aggcatgagc cactgtgcct ggccctgca aggcactttc taagccagat tcatcaaccc
135721 ttgaacttta tccctggcgg cagaacctag agttctcagc atgatggcaa agtggaaggg
135781 gcgaggggta tcatcctttg tgcgagcgca ggcatcccca ttccatgccc tgcctccaag
135841 ctgccaggag gacccctgga gggcttccta agaggaatgg gaacttgagt gttttccaca
135901 aacctcctgg ctctgaatac cgtgagcagt ttggggtggc tgacgctgag gccagacgct
135961 tgtggtcaga aagcggaagc ttcctccctg tgctctgtag tctaggccag aggccctagg
136021 aacagtttct gatgacagag gagccaggcc catgtggtgg gatgacatgt cttgggtcca
136081 gccacatgtg gaccagcctc ggccccacga caatgcccct cctgcaggga gagtatcagc
136141 ctcatctgcc acctctgaga aagccttcct gccacagctt gtcctcagga gagcagggcc
136201 acacacaagg cctcgcccat catggacagg gtgggcaggt tctgatggga caggagtctc
136261 agcatctcag gggctcgggc ccatctggag gagcagagtg ggggctgagt ggcccaggac
136321 tggatacgcg tcgggcctgc cccacgccag gccctgcatg ccacagggat ttacagaggc
136381 cttagctgca ggttgtgagc caagacagag attcctgatc ccaccgagga gtggggagag
136441 ggcagtgagg ggtagaaggc tcggtgggcc ctggggtctg gagctctgaa ttcacatccc
136501 agcttcaggc aagtagctgg atggcctggg cacattgctt cattctctga agctgtttct
136561 tcatctaccc aaaggagata cccctcactt gcaggaccat tgagaaaatg aaatgacacc
136621 atcctgggtg gcctcctttc tccagaggca caggccaccg gttgtgtgca tcagaaccac
136681 cagtgcccct tcctgaatcc aggggggttgc agggcaccag gccccacacc gcctgtgagc
136741 tagcatgggc ccctgcgtca cggccacttc gtgactacat gtgccaatcc gagtaactgg
136801 agcacacatg ggaggaggaa actgaacctg tgacctcaaa ctccttcact caaagcccag
136861 aaggaactcc tgaaaggctg gagacagggc tgtgaggaca gagggagagt gggaggcatt
136921 ctgaatgctg gtggggcagg cagagcaagt ctgtgtgcgg tgaggactga ggggcggcca
136981 ccagaggccc gggcctggtc tgagtgtggc tgctgcaggg gaagtagctt tcctatggct
137041 ctgaggggct ggagagggag gaaggtgtcc ccaggggata gatgacagga aagctggggt
137101 ggggtgggag gagctaacag ggacactctc atgggaggga ggctcccagt accttggact
137161 aagaggggag ggagatgggc tgaggaggca ttccaggact gggcaggtcc cacaggagg
137221 gcccgatgtc tacctggggg tgacgaccca cacgaagaga ctgagcagct tctctgaggg
137281 agtggacagt ggggtgaccc tccagcacac ctgtggtgca gtcacagggg actgggacac
137341 tcctggcccc ctgccctacc tacacctgca ggcacctggt ggagagcccc tgagtttcac
137401 ttggggtgaa atcactaggc agatttacaa ggactccatc tgccatctga cagggacttc
137461 cacagcagga gggggccagg cctgcagtct ggctggtcta tggccagccc agccactttc
137521 ctggtgctgg cttcaagcct gaatatgata agaggtgaac aaggggcaga gggctccagc
137581 cttgacccaa ctcagggagt aaaagacaaa gcttgatggc tgtggttcta acatcccagg
137641 ggccactaat ggaagaatga cagataaagg cctccttcca ggaaaatacc agggtcacat
137701 gtgtcaaact gcaaaatatc ttcggaaggt ttgtggaact acaatggcca ccttcctccc
137761 tcctctctgg gccaagtaca ctgggctgat gctatatttg tctatttgct gtgacacatt
137821 aaattctcag gtgacacact gaattatggt gggcactatc aacagtggac accccccaac
137881 aggccctcag gaagcactgg gcctggaat ggccgagcga gtgattatcc tgctttacag
137941 atagaaactg aggctcagag agcaatggtg gcctcaagat cagaacctac acctgtgtga
138001 tggccaagcc caggttcctc ccacagttcc ccaaggccac atcttgagaa aagccctgaa
138061 ccggaagcta gaaggcccag ctttgagccc tggtttgtac cctggatgga gtgtaaaggg
138121 gcaatgtgga gtggcatgga aggacaggga aaagcttcat aagagggtat ttcaggcagc
138181 ttttaggggc tgatcagatt tcagagggca gatgagtagg aggatgggca tgggtagcac
138241 atttcagatg tggggaactg ggagggcagg gtccccgggg gattcacacg tgggaggagg
138301 aaggctggac acagtttctg gggacagaag tgggtggcgt ggtggtgcag atgctggaga
138361 gaaacaaggg aaacctgcaa ctcaccggcc tcatttcaca agggccact ttgctgattt
138421 tgcttgttgc ttttaacttt ttattggata tgtagttta aagctttga atatttcggc
138481 aaagagtcag ttggtcagtt ttcatgtgag ctttctatca gcatttttagg aaagttttca
138541 tctgtctttc atcagatctc tgctgttgct gggacaggga gacggatctc tctgcggaag
```

FIGURE 2 (cont.'d)

```
138601  caaggatgtg  tgccccaccc  ccagactacc  catcttggag  ggggactaat  gaggggctgt
138661  gggaggagga  agctgtagag  cagagaggaa  gattgggggc  cagacaaaac  agagactcgg
138721  gatgagagag  ggggaggcta  tggggaagag  ctgaggaaaa  caagggacgg  agagagggat
138781  tggggtagtg  gataggagga  ccaaggggca  gagaaggggg  aaaatgtggg  acagagagcc
138841  ggagattgag  ggagcagaga  aggggcctct  gagaggtggc  tggaagacag  agtgtagagg
138901  aaaattcaga  gcaaaaaaga  agggagagtt  gtagggtaga  gagcagaaac  gggggggcatt
138961  tagggaactg  ggagcagggg  aaggaagagg  aggcagaaga  ggggggcagaa  tgtagggaaa
139021  agatggctca  gaggggggaga  ctgggagatg  agagacggat  tgagggtcat  accaaagaaa
139081  tatttatgct  ccactaatat  attcccattc  acaagaagga  ggtattctag  aattaatttt
139141  tcatgaatgt  aagaatactc  actgacttaa  gaagcatgaa  tcattataac  acttttctac
139201  acttgttgaa  catattcaag  tatcatatat  taaacaccac  gctattgccc  ttagctttct
139261  taaaagtacc  agcacagaat  gaaatgggcc  aactaagatt  tctcagaaat  cttcagatct
139321  gttacagtta  tcgtatccga  tctgaattac  tttaaattta  cagagttaaa  gaaataaatc
139381  aacttgttaa  atttgcctag  acttgggtta  gcctctggaa  acagggccat  tctgtgtagg
139441  atcccggctt  tctccagcag  acagtgagga  gccaaggaag  acacaaccgt  ttataggata
139501  atcccacctg  cgaaggactt  gattcccagt  cctgactgaa  tcactatgcg  gaactctgat
139561  gagaataaca  agggacctgt  gactcacttt  atcaaggaaa  aaatcagtcc  tgtccattat
139621  ttgactgaac  tatgccctgg  aggagggggg  tgttgacctg  ccaataactt  ggaaatgatt
139681  aaattgtgtg  gaaatacctt  tattgttatt  gttatcgtta  ctactgttaa  caatacagat
139741  tttaacactt  ttccctgtaa  aatgggataa  ccttgtcttc  tcagcaagta  cttcctctag
139801  ggtttctctt  ttacctttac  ccaaaaagga  tgattgtctt  tacagatacc  aagctgggag
139861  aatgaggaag  tagttctggg  ctgggcaaga  gaaagtgttg  agtaactttg  catcaacagg
139921  aactttctca  aaagctgatt  ttttcaagga  aactttcagc  cttagctggt  tccccaccct
139981  gcggtagccc  ccaccccaa  ccacccccg  ccccacccct  gacttatagc  cctctcaacc
140041  caatggaaat  gtgacatgca  aatctctcct  gaaatttgcc  cctgggattc  cggctgaggt
140101  gtttaattat  aatgtcattt  gaatgacttc  tcagggtagg  ggaagacaga  ccgagagagg
140161  gagatagtgg  acaaaacagt  gccttcactc  tttgtccgaa  gagcccgcta  tggccacgtt
140221  atcatgtccc  ctgcaggagg  aaagcacaca  cggggtgccc  gtgctgtgca  gtgtgagcac
140281  accaatggcc  tgtgcttcta  gaaccttatg  atgtgtggag  gagaatgggg  aggaggaagc
140341  acttacaaag  gggaagtagc  ctgtaccctg  tccttctccc  ccaggtgtgg  ggaatccatg
140401  aaataatgga  agtaaatgaa  ggtgcgtcag  aaatggcaga  gggtgccatc  accctaaatg
140461  gacgacacat  taactccagg  gcaccgcagt  cctcagggtc  agttccccga  ctggggcaac
140521  taagcaactg  aaggttgctc  ttgtactcaa  cacctaactc  ttcttgaagg  gagctcaagc
140581  caggatgcta  gtgaacttgg  ctgagggcca  tgtcgtgcta  cagcgagggt  atgggctcct
140641  ggataggaat  cgagcccatg  gagagcttgg  aatccagaaa  aagagtagtt  tttacttact
140701  ttaggctctg  cacacctaaa  acacaaattt  tatccaagag  taatcagttg  aaacatgaac
140761  ttgccggttg  tatttgtcca  ttatgagcaa  tttcacaagg  tttgatcaaa  taataaacta
140821  aatggtgaga  aggcagcttg  gtaaagtcta  aatctttttg  gtccagttag  gagctggggt
140881  ggggtggaag  ggaactgata  ttccctgcgc  acctgcagta  tgtctgggac  tattaccagt
140941  catttacgga  gcgcttcctc  tgtgccaggt  actggattag  gcacttcatt  aaaggctcag
141001  tgagaactgc  gacctgccca  tgctcatgga  aaagagtcgt  ggggctggaa  ttcaggtcca
141061  gatcagcatt  aggaactagc  ttccaaatgc  tgagggctcc  ctcgcgtcct  cacacctagc
141121  gtggaagtgt  tccctggtgt  acattctgct  gggagggagt  gcagccctc  catttaggaa
141181  aagcctctcc  tggcctgggt  tctgttcctt  ccctttaatt  tcctctgggg  actgtcctga
141241  gaatgtaagc  tgcccaggtg  ccgtctgagc  caccagatgg  gcctgggctc  acccatgact
141301  catggaccag  actgaagcca  accctccatt  ttcagctggg  gaaactgagg  cccagacaga
141361  cggtagagtg  agctggtggt  catgtctgga  cagaactcag  gcctctggac  ccgctgacgt
141421  gcacccttcc  ccacggctca  cagctggctg  ctccgaggtg  ccctcagagt  tctgtgagca
141481  tgactcatct  gcctctccct  ccctgtgcga  cctgcagaag  gagcctaagg  aagaggtggc
141541  acaagaaacg  cggcccagtg  aaggggctc  cggagcctcg  gagcccagat  cttgaagtgg
141601  aggggaaacc  ttgggccttc  tcctcccagg  gaagacgcct  tgcaggcggc  acgcgggaag
141661  tctccgtttc  cgacagggt  cgcggccgcc  gcgagggtc  ctggacgctt  gcccaccagg
141721  gtacccaccg  gccactggga  gcccagggca  cgccccaccg  cagttctgcc  ctccctgaca
141781  gggtcctgga  cacccccagt  cctgtccggg  ccgccccgac  gggccctcgg  cgcccccgcc
141841  caggcctctg  ccgtccaaac  cgggtcccgg  acgcacctca  gcccgcgctc  cacccgtgcc
```

FIGURE 2 (cont.'d)

```
141901 ccgcccgcgc tcaccgcgcc acgctcgaag tcgttgtaga agggcttgtc cagcaggtgc
141961 ttctcgctgc agcccgccga gcccacgagg ctgaggtaga tgtagtcgtc agtgtcttca
142021 ccacggggtg aagtacggtc cnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
142081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
142141 nttttgggt tgttgttgtc tctttgtttt tgcgagcggt ccttccgccc cgtggtgaag
142201 acaagtgggc gcctctgcct ggccatccca tctgggaggt gaggagtgcc tctgcccggc
142261 caccccgtct gggaagtgag gagcgtgtct acccagccac cacgtctggg aggtgaggag
142321 cgcttctgcc tggccgcccc atctgggaag tgaggagcgc ctctatctgg ccaccccttc
142381 tgggaagtga ggagtgcctc tgcccggccg ccacccgccc tcggaggcga ggagcacctc
142441 tgcccggcca ccaccccatc tgagaggcaa ggaccacctc tgcctggccg ccatcctgtc
142501 tgggaggcga ggagcacctc tgcccagccg ccgccccacc taggaggtga ggagcgcctc
142561 tggccagccg ccccacctgg gaggcgagga gcgcctctgc ctggccgccc catctgggag
142621 gtgaggagcg cctctgccca gccaccaccc catctgggaa gtgaggagcg tctctgccag
142681 gccgccccgt ctgggaagtg tacccaacag ctccgaagag acagcgacca ttgagaacgg
142741 gccatgatga cgatggcggt tttgtcaaaa agaaaagggg gaaatgtggg gaaaagaaag
142801 agagatcaga ttgttactgt gtctgtgtag aaagaaggtg acataggaga caccattttg
142861 ttctgtacta agaaaaattc ttctgccttg ggatgctgtt aatgtacaac cttaccccca
142921 accccgtgct cgctgaaaca tgtgctgtgt caactcaggg ttaaatggat taagggtggt
142981 gcaagatgtg ctttgttaaa cagatgcttg aaggcagcac gctcattaag agtcatcacc
143041 actccctaat ctcaagtacc cagggacaca aacactgctg aaggctgcag ggacctctgc
143101 ctaggaaaac cagagacctt tgttcacctg tttatctgct gaccttctct ccactattat
143161 actatgactc tgccacatcc ccctctctga gaaacaccca agaatgatca ataaatacta
143221 aaaaaacaaa ttaattaatt aaataaattt catatggaac caaaaaagag cctgcattgc
143281 caagtcaatc ttaagccaaa ggaacaaagc tggaggcatc acactacctg acttcaaact
143341 atactacaag gctacagtaa ccaaaacagc acggtactgg taccaaaaca gaggtataga
143401 ccaatggaac agaacagagc cttcagtaat aatgccacat atgtacaact atctgatctt
143461 tgacaaacct gacaaaaaca agaaatgggg aaaggattcc ctatttcata aatggtgttg
143521 ggaaaactgg ctagccaata aatggtgtag ggaaaactgg ctagccatat gtagaaagct
143581 gaaactggat cccttcctta catcttatac aaaaattaat tcaagatgga ttaaagactt
143641 acatgttaga cctaaaacca taaaaaccct agaagaaaac ctaggcaata ccattcagga
143701 cataggcatg ggcaaggact tcatgcctaa aacaccaaaa gcaatggcaa tgaaagccaa
143761 aattgacaaa tgggatctaa ttaaactaaa gagcttctgc acagcaaaag aaactaccat
143821 cagagtgaac aggcaaccca cagaatggga gaaaatttt gcaatctact catctgacaa
143881 agggctaata tccagactct acaatgaact caaacaaatt tacaagaaaa aaacaaacaa
143941 ccccatcaaa atgtgggcca aggaaaagaa cagacacttc tcaaaagaag gcatttatgc
144001 agccaaaaga cacatgaaaa aatgctcatc atcactggcc atcagagaaa tgcaaatcaa
144061 aaccacaatg agataccatc tcacaccagt tagaatggtg atcgttaaaa agtcaggaaa
144121 caacaggtgc tggagaggat atggagaaat aggaatactt ttacactgtt ggtgggactg
144181 taaactagtt caaccattgt ggaagtcagt gtggcgattc ctcagggatc tagaactaga
144241 aataccattt gacccagcaa tcccattact gggtatatac ccaaagtatt ataaatcatg
144301 ctgctataaa gacacatgca cacatatgtt tattgtggca ctattcacaa gagcaaagac
144361 ttggaaccaa cccaaatgtc caacaatgat agactggatt aagaaaatgt ggcacttata
144421 caccatggaa taccaagcag ccataaaaaa tgatgagttc atgtcctttg tagggacatg
144481 gatgaagcta gaaaccatca ttctcagcaa actattgcaa ggacaaaaaa ccaaacactg
144541 catgttctca ctcataggtg ggaattgaac aatgagaaca catggacaca ggaaggggaa
144601 catcacacac tggagcctgc tgtggggtgg ggggttgggg gagggatagc attaggagat
144661 atacctaatg ctaaatgacg agttaatggg tgcagcacac caacatggca catgtataca
144721 tatgtaacta acctgcatgt tgtgcacatg taccctaaaa cctaaagtat aataataaaa
144781 aaataagctt ataaaatgct tttaatgcta tataacttta taactctgaa agaataatag
144841 atttgtatta tgctgtcagt gagtaggtct attaagtgat aacattaaac acaaataccca
144901 ccatttataa agtatgattt tgatatcatc ggttgtgtat tttcacccca aactctgtag
144961 atagtaactt tgttttctca tttgaccatg ctcaatcttt agagaccatg ctcttctctc
145021 aaaatgactg taggttcatc caagtatgtt tgctacccaa aatcaatgaa acacagtcac
145081 aactatgtct gtctaggaat aaagccagct aattagattc ttattctaag gaacaagaag
145141 agggcaggta agaatttgat tatggcagaa ttctgaccat aatcaataac tgttttctat
```

FIGURE 2 (cont.'d)

```
145201 tttttctcca tgttgtcggg tggttcatac ctgactttca tcatttccaa tgattcctgt
145261 ttgtttttgtt tataaatttc aaaatcatca tgaaaagttt cactgaatga aaacctgaaa
145321 attgggaaat aaacattttt ctgcaaaaaa aaaaaaacaa tgaacactga cttctcctat
145381 ttctcaaagt catctcaaag ccatatgagg attaccacaa acttgcaggt gagaaaattc
145441 tttgcaatgt aagaagtgcc atgcaaatta gttgatgcta ttataattag tctcagggat
145501 caaaaatgct tgaaccctaa atctaacact tcaaaggaaa gcattatttt tcattcattt
145561 tacaagttac acctcccttc ttccccacat ctttgtttag aatctggacc ctgaagttag
145621 aggaccaaga ttcaaatccc agcctcatca gtactagcta tgtgatattg ggaatgttac
145681 ttgatccctg cttatcttac tttctgcatt tattaaatgg ggatgagaat aatatctacc
145741 caaataaggt gcccaatgca gtgcccaaca gcatgaagcc caataaaggt tagttaacat
145801 cacatccata attgacacct ttaggtatta gattttcatc atcccagaac attttccttc
145861 tttaagcctt tttctttcta agtggcactt tcttggatac tgattgcact cctcacaaac
145921 ttgaaacgtt caaacacaca agatgccatt taggagacat tggaacttgg gtttccttct
145981 ctgtaaaact gagtaatgac agtcacctcc cagggctgtt gtaagaatga atgagctaga
146041 gtatgtaaaa tatcttagca cagagtgctt aagaaattat tagttccagc caagcgtggt
146101 ggctcacgcc tgtaatccca gcacttaggg aggccaaggc aggcggctca tctggggtca
146161 ggagttcaag accacctggt caacatggtg aaaccccgtc tctactaaaa atacaaaaat
146221 tagccaggcg tggtggcatg tgcatgtaat cccagctact caggaggctg agacaggaga
146281 atcacttgaa cccaggaggt ggaggttgca gtgagccgag atcgtgccat tgcactccag
146341 cctgggcaac aagagtgaaa ctctgtctca aaaaaaaaaa aaaaaaaag aagaagaaga
146401 agaaagaagg aaagaaagag agagagagaa agaaagaaag aaagaaagaa agaaagaaag
146461 aaagaaagaa aaagaaagaa agaaagaaa gaaagaagga aagagacaga aagaaagaag
146521 ggaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaag
146581 ggaagaaaga aagaaagaaa gaaaaaaga aagaaagaaa gaaaaagaaa gaaagagaga
146641 aagagaaaga aagaaagaaa gaaaggagag acagaacgaa ggaaagaagg aaggaattat
146701 ttccctttttt cccacccacg cctcaccaca aaccttgttg tggggataac atgtaaaagt
146761 gaacaaaact gagaagatca catcgcatat gcactcagcc tctagtggga gacacaggca
146821 ataaacagga aaagttaaaa acagtactag gtagtggtga gtgcaattag cctcccgcag
146881 cataaaggga ggagaataac cagtggctct ttcatgcaga gaatcagggt agacctctgg
146941 ggagagaccc gcactcagac tgggatggaa ttatttattt tatgcgtgtt cagttaggag
147001 tagaggtgct ctgtcgtgat tatctaatct tgggaggaac aatgtcagac gggtttcaag
147061 atgagtatga gaattggtct tccttctgaa aaaacaagaa ttgagttcac actaatcaca
147121 aatacatcaa gcctatttga gtcttgtgtg tgtcatggat tgaagtgtat cttt ccactt
147181 agtcaagaag ttccaatgag aagaatgctc cttaacttcc taagtgcaac agagtagttg
147241 aactgagcca tggatggtaa atctacttaa gaaagcacat gccatggaaa gatagcattg
147301 gctgccctgc ctacttctga tggcacagcc ttgcaggaag ggaaagaagc caagaggcaa
147361 aagcctggtc ttgttctgaa aggcacaagg aggtggaaga ttagggaaa ctcacccaaa
147421 aatgactcag ctctgaactc agactcaaga agccacaata agcaacatga atggaactgg
147481 agggaaataa accaggcgta gaaacacaaa tgttgcatat tcttactcat gtgggaacta
147541 aaaacatgca tttcaaggag aatagaatga tggttatcag agactgggaa cagttgtggg
147601 tgggggtgtt aagagaggtt gcttaatggg tacaaacata tagttagata gaaggtataa
147661 gttctaatgt ttgacagcag agtaggagaa ctatagttaa cagtaatata ttgtatactc
147721 caaaatagct agacaggaag atttgaaatg ttcccaacac atagaaatga caaaagcttg
147781 aggtaatgga tacctaaat atcctgactt gatcattaca cagtctatgc gtgtaacgaa
147841 ataccatatg taccccataa atatgtacaa atattatgta tcaataaaaa ttttaaaaa
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147961 acatcttaag atgtatccct cttcctctga atcttcctgg gatagaacaa atgaaaacta
148021 aacaaggagt gggctgggag gagctgtcaa catccatcct aaggaaaagt ctgttagggc
148081 tatgagcttc ctctgtccta gagtagagct gggaaaatag agtcttgaca attgatttct
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148201 acaggcttaa attctgttta gttatgcaaa caggccagaa gaaactgaaa taggctataa
148261 atgtttgaag ctggccaaaa gaagatgtag tcacacaaga taccctctgg aggaaagtga
148321 ctgtcaggaa agtcactttc ctgaccagca aaaggaccag cactattttg tcctgctgaa
148381 gaagtacatt tgtcctgctg ctgtcatggg gacagtggct ccaggcttc ctgtggacat
148441 gccacaagtt ccactccatg agtcaggaga tcatgcggtc agctgggggg aacttagggt
```

FIGURE 2 (cont.'d)

```
148501 tgctctcttg agcttagcct tatgctgcgt gtctgctttg ccaaccacaa aaacgatagt
148561 ttcatagcaa gttgcaggct ccctggaaac ttaacctacc tactaggata catttacagc
148621 tgcttttctc ctggcatcag gctggagatc aagaaataca taaaacatag tccctgccct
148681 cagttagctc agaatatggt gggggaatgg agacagaagc aaatactggt gggacaagtg
148741 acgatgggcc aaaatatggg cttaaacaaa ggttgtggga gctcagaaaa ggagcaactc
148801 actctgcctg aaagagtcat ggagggctcc acggaaaaag caacatttgt gcaggaggag
148861 attagaacac agaggagaag gatagcagca ctccagatga agggaaggaa atgtgccaag
148921 atttcatggg aatgagaaga tgtaaactgc tcaggaaaaa ccatggttga agctcttcac
148981 agtggctgaa gcatggtgtg attgtcagtt ttgcttgtca acttggtcag gctgtagtac
149041 tcaactattc aaccaagcac tgatctaggt attgctgtga aggtattttg tagtcgcaat
149101 taacctctac aatcagttga ctctatttaa aggacattat tctgtactat ctgagtggac
149161 ctgatccact tcatcccaaa ggtaaatgat tctccaacag tgttctcatc tacatctagg
149221 gcttggaaga tgaaggtgaa ggagaatatg gaaaaacaac aagaaaaaag tcaatcaatc
149281 agaacttcca gccctgtgtt tgttagttca ctttatgttc aaccagtatg tctccacttt
149341 tatctgcttc cttgtaagat ttcatctgaa aaagggaatt cactcttcag gtgttggaaa
149401 tcaattatga gagaagcact tacagaatga ctatctgaag agctctgcag acattctcca
149461 gagtaaaaca accataaccg gtgaaaatta aaaacaaaca aaataaaaaa atgttagagt
149521 attggaaatt gttctaaggg ccgacagcaa atgaagaaat ccaagaaagc ctaccaattt
149581 cagtgagagg agtgagagtc tatggtgttg agtctatggt gtttaagttc tgttcatttc
149641 ctccctctcc tgcaatcagt tcagtgaaac agaaaccctg ctccagagat gtgcagccaa
149701 aaagacaggg tgccctttcc cctcagctcc caatctaggg cagactacca gcatttccca
149761 agcccatctc tggctctatg ttgcagaagt tctattccaa gaaagtttga ctgagaatct
149821 gaagcttcct tcttccactc agcctctact attaaggcgt aagttctatc cccagtgcca
149881 cgggccaaga atactgatgc tgaatgtcct tgctccgcta cactcatagg gcagagattc
149941 catgggagga gtgaagtttc cattccagaa aaggcagaaa aacagaaatt actgcccaat
150001 ccagtacccc acccataaag aaggaaagac atctgagaaa agcatgacac tgtccccaaa
150061 accacctgca gagtagtggc agtagaggca gtagggagac tagaggacct gcctagaggg
150121 agaagtaggc cataagaaga aaagtctcta gttctcccta aagggacaaa cttttatttgc
150181 aacagaacat gcggaagttc aagcctaagg gcactgtcaa aaacaatgaa tattttggtg
150241 gtaagcaatt aataggttaa tggcagctta gtgagagcaa caaactaaac cataaaccag
150301 ctagacatat acaataaaaa tccaagaaag agagagccaa gaagggcctt cctgaggtta
150361 aaacaaacat caaagtcttg tctgaaaaac tgctcctgca aaggaagcaa aatatatttg
150421 gatcagactg tggagcaatt tatgccccta aaaagctgtc aaaaccaaaa gagcaattat
150481 ctagcaattg ctggaggtta acagttgggt atgataccaa aagaggcaaa caactgaaca
150541 gatcagagaa agaggcagtc aaagagagca ctgctaaatg cactgtaatt ccaatttgag
150601 agaaaatgtg cccagtgctg tgactccctc aggaacaaca tcagaggcca caaattatgg
150661 tggaaatagg cttcactata tagtctagcc aggcaattaa acaaataaac aattaaacaa
150721 cagtaacata gtgaggggggg cagaaatgag tattgcaact agctagaaca tattttgaa
150781 caaaaaaatt atgagtcaag cagagatatg gaaaagacag agccatacac cagaaaaaag
150841 gtaagcaaga gaaactgcct ttgtgagtgc caagatgtca gacatagcag aaaaaaaacc
150901 tcaaagtaat tattataaat atgttcaaaa actaaaagaa aatgtgctta aaaaataaaa
150961 gatggtatga taatttcttg tcaattcaaa aataccaata atagattaaa aatatttttt
151021 caaaagttaa ttaaccaaat ggaaattctg gggtttaaaa gtaaaataac aacaataaga
151081 acattttgct agaggaaatg aacaatagat ttgtaccaga aggaaaaata atcaaataaa
151141 cagggatttc atcaacacca aacctgtctt acaagaaata ctaaagggag ttcaatctga
151201 aagaaagaac attaacaagc aacaggaaat catctgaagg tacaaaactc actgtacctt
151261 cagatgataa taagtcctca aaaaacacag aatattataa cactgtaatt atggtgtgta
151321 agctacttat atcataagta gaaagaggaa aagatgaact gattaaaaaa caattacaac
151381 agcttttcaa gacagtataa taagatatat aaataacaga aagcttaaaa gcatataaat
151441 aaagttaaaa tgtagaggtt tttttagttt tcttttttgct tgattgtgta tttatttatg
151501 caatcagtgt tgttttcatc agcataaaat aatgggttat aagatagtat ttgcaagcct
151561 catagtaacc tcaaatttaa aaacatacaa tgtatacaca aaaagtgaag agcaagaaat
151621 taaaacatac caccaaaaaa aatactttca ctaaaaagga gacaggaagt aagaaaagat
151681 gggagagaag atcacaaaac aaccagaaaa taaataacaa aatggcaagc aagtccttat
151741 ttgtcaataa taatattgaa tgtaaatgga ctatactctc cagtaaaaag atacagagtg
```

FIGURE 2 (cont.'d)

```
151801 gttgaatgga ttaaaaaaaa ggacccaatg atctgttacc tacaagaaat aaacttcact
151861 tataacaata cacagactaa aaataaagtc atgggaaatg atacttcacg acaatggaaa
151921 ccaaaaaaga acaggagtag ctataccttt atcagactaa atagatttca agacaaaaat
151981 tgttaagaaa aaccaaataa ggtcattata taatgataaa gagatcagtt aagcaagagg
152041 atgtaacaat tgtaaatata tatgcactca acattggagc acctagataa ataaaacaaa
152101 tattattaga gctaaagaaa gatagacccc ctcccccaaa acaataatag ctgtagattt
152161 caatgctcca cttttcagcat tggacagatc ttccagacag aaaatcagca aggaaacatc
152221 agatgtaatc tgaactatag accaaatggg cctaataagt atttacagaa tatttcatcc
152281 aaaggttaca gaagacacat ttttctcctt agcacataca tcattctcaa gaacaggcca
152341 tatattaggt catgaatcaa gtctcaaaac attcaaaaaa actgaaataa tctcaagcat
152401 cttctttgac cacaatggaa taaaactaga aaccaataac aaggggaatt ttggaaacta
152461 tacaaaaaca tggaaattaa acaatatgtt cctaaatgat aagtgggtca atgaagaaat
152521 tatgaattga attgaaaatt ttctaaaaac aaatgacaat ggaaacataa tgcaccagaa
152581 cctatgggat acaacaaaag cagtaccaag agtgatattt ccagataagg gcctacatca
152641 aaaaggaaga aaaacttcaa gtgaataacc tgatgatgca tcttaaagaa ttaaaaaggc
152701 aagagtaaac caaacccaaa attagtagaa gaaaagaact aataaagatc acagtagaaa
152761 taaataaaat tggacttctg ctccaagatg gcctaataga aacagctcca gtctgcagct
152821 cccagcatga ttggcacaga agatgggtga tttctgcatt tccaactgag gtaccaggtt
152881 catctcattg ggactggttg gacaatggat gcagcccatg gagggtgagg tgaagcaggg
152941 tgaggagtca cctcaccccg gaagcacaag tgattggggg atttcccttt cctagccaag
153001 ggaagccgtg acagactgta cctgaaaaat cggttcactc ccacccaaat actgtgcttt
153061 tcccatagtc ttagcaaccg gcagaccagg agattctctc ccaagcctag ctcatcaggt
153121 cccatgccca cggagcctgg ctcactgcta gcacagcaat ctgagatcaa cctgcgaggc
153181 tgcagctggg tgggggagg ggtgtcagcc attgctgagg actgagtagg taaacaaagt
153241 ggccaggaag ctcaaactgg gcagagccca ccgcagctca gcaaggccta ctgcctctat
153301 agattccacc tctgtgggca gggcataact gaacaaaagg cagcagacaa cttctgcaga
153361 tttaaacgtc cctgcctgac agctctgaag agagcagtgg ttgccccagc atggcatctg
153421 agctctgaga acagacagac tgcctcctca agtgggtccc taaactccat gtagcctaac
153481 tgggagacat ctccccatag gggccgacag acacctcata caggtgggtg ccactctggg
153541 acaaagctct cagaggaagg atcaggaagc aatatttgct cttctgcaat atttgctgtt
153601 ctgcagcctc tgctggtgat acccaggcaa acagagtctg gaatggacct ccagcaaact
153661 ccagcagacc tgcagctgag ggacctgact gctagaagga aaactaacaa acaaaaagga
153721 atagcatcaa catcaacaaa aaggacattc acaccaaaac ctcatctgta gtcaccaata
153781 tcaaagacca aaggtagata aaaccacaaa gatggggaga aaccagagca gaaaagctga
153841 aaattctaaa aactgagcac cgcttctcct ccagaggatt gcaactcctc accggcaacg
153901 gaatgaagct gggtggagaa tgactttgac aagttggcag aagtaggctt cagaaggtcg
153961 gtaataacaa actactccaa actaaaggag catgttctaa cccattgcaa ggaagctaaa
154021 aaaccttcaa aaaaggttag acaaatggct aactagaata aacagtgtag agaggaactt
154081 aaatgacctg atggagctga aaaccgtggc atgaggacat catgatgcat gcacaagctt
154141 aaatagctga ttaaatcaag tggaagaaag aatatcagtg actgaagatc aaattaacaa
154201 aataaagcaa gaagataaga ttagagaaaa aagagtaaaa agaaatgaaa agcacctcca
154261 agaaatatgg gactatgtga aaaaccaaa tctacacttg attggtgtac ctgaaagtga
154321 tggggagaag gaaaccaagt tggaaaacac tcttcagaat actatccagg agaacttccc
154381 caaactagca aggcaggcca acattcaaat tcaagaaata cagagaacac cacaaagata
154441 ttcctcaaga agagcaaccc caagacacat aattgtcagc ttcaccaagg ttgaaatgaa
154501 ggaaaaaaat gttaagggca gccagagaga aacgttgggt taccaacaaa gggaagccca
154561 tcagactaaa agtagctctc tcagcagaca ccctgtaagc cagaagagag taggggtcaa
154621 tattcaacat tcttaaagaa aataattttc aacccagaat ttcatatcca gccaaactaa
154681 gcttcataag tgaaggagaa ataaaatcct ttacagacaa gcaaatgctg agagattttg
154741 tcaccatcag gcctgcctta caagagctcc tgaggaaac actgaacatg gaaaggaaca
154801 actgttacca gccactgcaa aaacacgcca cattgtaaag accatcgatg acatgaagaa
154861 actgcaacaa ttaactggca aaataagcag ctcacagcat aatgacagga tcaagttcac
154921 acataacaat attaacctta aatgtaaatg ggctaaatgc ctcaattaaa gacacagact
154981 ggcaaattgc atagagtcaa gacccatcag tgtgcggtat tcaggagacc catctcacat
155041 gcaaagacac acatagggat ggaggaagat ccaccaagca aatggaaagc caaaaaaaaa
```

FIGURE 2 (cont.'d)

```
155101 aaaaaaaaaa aaaaaagcag gggttgcaat cctagtctct gataaaacag agtttaaacc
155161 aacaaagatc caaagagaca aagaaagcca ttacataatg gtaaagggat caatacaaca
155221 agaagaacaa actatcctaa atatatatgc aaccaatatg ggagcaccca gattcataaa
155281 gcaagtctgt agagacgtac aaagagatgt agacttccac acaataataa tgggagactt
155341 taacactcca ctgtcaatat tagacagatc aatgacacag aagggtcaca aagatatcca
155401 ggacttgaat tcagctattc accaagtgga cctaatagac atctacagaa ctctacaccc
155461 caaatcaaca gaatgtacat acttctcagc accacatcat acttattcta aaattgacca
155521 cataattgga agtaaaacac tcctcagcaa atgtaaaaga acagaaatca caacaaactg
155581 tgtctcagac tacagtgcaa acaaattaga actctggatt aataaactca ctcaaaatca
155641 cacaactaca tggaaactga ataacctgct cctgaatgac tactgggtac ataatgaaat
155701 gaaggcagaa ataaagatgt tctttgcaac caataagaac aaagacacaa cataccagat
155761 tctccgggac acatttaaag cagtgtgtac agggaaaatt atagcactaa atgcccacaa
155821 gagaaagcag gaaagaacta aaatcaacaa cctaacatcg caattaaaag aactagagaa
155881 gcaagagcaa acacattcaa aagctagcag aaggcaagaa ataactaaga tcagaacaga
155941 actgaaggag atagagacac aaaaagcact tcaaaaaaat caatgaatcc aggagctggt
156001 ttttaaaaag atcaacaaaa ttaatagacc gctagcaaga ataataaaga aaagagagaa
156061 gaatcaaatt agactcaata aaaaaagata aaggggatat caccactgat cccatagaaa
156121 tacaaactac catcagagaa tactataaac acctctacat aaataaacta gaaaatctag
156181 aagaaggggg aggagccaag atggccaaat aggaacagct ccagtctaca gctcccagcg
156241 tgagtgacac agaagacggg tgatttctgc atttccatct gaggtaccgg gttcatctca
156301 ctagggagtg ccagacagtg ggcacaggtc agtgggtgcg cgcactgtgt gcgagccaat
156361 gcagggtgag gcgttgcctc actcgggatg tgcaaggggt cagagagttc cctttcctag
156421 tcaaagaaag gggtgacaga tggcacctgg aaattcgggt cactcccacc tgaatactgc
156481 actttccaa cgggcttaaa aaacggcgca cctggagagt atatcccgca cctggcttgg
156541 agggtcctat gcccacggag tcttgctgat tgctagcaca gcagtctgag atcaaactgc
156601 aaggcagcgg cgaggctggg ggaggggcgc ctgccattgc ccaggcttgc ttaggtaaac
156661 aaagcagctg ggaacctcaa actgggtgga tcccaccaca gctcaaggag gcctgcctgc
156721 ctctgtaggc tccacctctg ggggcagggc acaggcaaac aaaaagacag cagtaaccac
156781 tgcagactta aatgtccctg tctgacagct ttgaagagag cagtggttct cccagcacgc
156841 agctggagat ctgagaacgg gcagactgcc tcctcaagtg ggtccctgac ccctgacccc
156901 cgagcagcct aactgggagg catccccgag cagaggcaga ctgacacctc acacagccgg
156961 gtactccaac agacctgcag ctgagggtcc tgtctgttag aaggaaaact aacaaacaga
157021 aggacatcca caccaaaaac ccatctgtac atcaccatca tcaaagacca aaagtagata
157081 aaaccacaaa gatggggaaa aaacagagca gaaaaactag aaactctaaa aggcaaagcg
157141 cctctcctcc tccaaaggaa tgcagttcct caccaggaat ggaacaaagc tggacggaga
157201 atgactttga cgagctgaga aagaaggct tcagatgatc aaattactcc gaactacggg
157261 aggacattca aaccaaaggc aaagaagttg aaaacgttca aaaaatttag aagaatgtat
157321 aactagaata accaatacag agaagtgctt aaaggagctg atggagctga aaaccaaggc
157381 tcgagaacta cgtgaagact caggagccga tgcgatcaac tggaagaaag ggtatcagcg
157441 atggaagatg aaatgaatga aatgaagtga gaaggaaagt ttagagaaaa aagaataaaa
157501 agaaatgaac aaagcctcca agaaatatgg gactatgtga aaagaccaaa tctacatctg
157561 attggcgtac ctgaaagtga cggggagaat ggaaccaagt tggaaaacac tctgcaggat
157621 attatccagg agaacttccc caatctagca aggcaggcca acattcagat tcaggaaata
157681 cagagaacgc cacaaagata ctcctcgaga gagcaacac caagacacat aattgtcaga
157741 ttcaccaaag ttgaaatgaa gggaacaatg ttaagggcag ccagagagaa aggtcgggtt
157801 accctcaaag ggaagcccat cagactaaca gcggatctct cggcagaaac tctacaagcc
157861 agaagagagt ggtggccaat attcaacatt cttaaggaaa agaattttca aaccagaatt
157921 tcatatacag ccaaactaag cttcataagt gaaggagaaa taaaatcctt tacagacaag
157981 caaatgctga gaattttgt caccaccagg cctgccctaa aagagctcct gaaggaagtg
158041 ctaaacatgg aaaggaacaa ccggtaccag ccgctgcaaa atcatgccaa aatgtaaaga
158101 ccatcgagga taggaagaaa ctgcatcaac taacgagcaa aacaacctgc taacatcata
158161 atgacaggat caaattcaca cataacaata ttaactttac atgtaaatgg actaaatgct
158221 gcaattaaaa gacacagact ggcaaattgc ataaagattc aagaccatc agtgtgctgt
158281 attcaggaaa cccatctcac gggcagagac acacataggc tcaaaataaa gggatggagg
158341 aagacctacc aagcaaatgg aaaacaaaaa aaaggcaggg gttgcaatcc tagtctctga
```

FIGURE 2 (cont.'d)

```
158401 taaaacagac tttaaaccaa cacagatcaa aagagacaaa gaaggccatt acttaatggt
158461 aaagggatca attcaacaag aagagctaac aatcctaaat atatatgcac ccaatacagg
158521 agcacccaga ttcataaagc aagtcctgag tgacctacaa agagacttag actaccacac
158581 attaataatg ggaaacttta acaccccact gtcaacatta gacagatcaa caagacagaa
158641 agtcaacaag gatacccagg aattgaactc agctctgcac caagcagacc taatagacat
158701 ctacagaact ctccacccca aatcaacaga atatacattt ttttcagcac cacaccatac
158761 ctatttcaaa attgaccaca tacttggaag taaagctctc ctcagcaaat gtaaaagaac
158821 agaaattata acaaactgtc tctctaacca cagtgcaatc aaactacaac tcaggatgaa
158881 gaaactcact caaaactgct caactacatg gaaactgaac aacctgctcc tgaatgacta
158941 ctgggtacac aacgaaatga aggcagaaat aaagatgttc tttgaaacca atgagaacaa
159001 agacacaaca taccagaaat tctgggatgc attcaaagca gtgtgtagag ggaaatttgt
159061 agcactaaat gcccacaaga gaaagcagga aagatccaaa attgacaccc taacatcaca
159121 attaaaagaa ctagaaaagc aagagcaaac acattcaaaa gctagcagaa ggcaagaaat
159181 aactaaaatc agagcagaac tgaaggaaac agagacaaaa aaaacccttc aaaaattaat
159241 gaatccagga gctggttttt tgaaaggatc aacaaaattg atagaccgct agcaagaata
159301 ataaagaaaa aaagagagaa gaatcaaata gatgcaataa aaaatgataa aggggatatc
159361 accaccgatc ccacagaaat aaaaactatc atcagagaat actacaaaca cctctatgca
159421 aataaactag aaaatctaga agaaatggat aaattcctcg acacatacac tctcccaaga
159481 ctaaaccagg aagaagttga atctctgaat agaccaataa caggagctga aattgtggca
159541 ataatcaata gcttaccaac caaaaagagt ccaggaccag atggattcac agccgaattt
159601 taccagaggt acaaggagga actggtacca ttccttctga aactattcca atcaatagaa
159661 aaagagggaa tcctccctaa ctcattttat gaggccagca tcatcctgat accaaagccg
159721 ggcagagaca aaaccaaaaa agaggatttt agaccaatat ccttgaggaa cattgatgcc
159781 aaaatcctca ataaaatact ggcaaaccaa atccagcagc acatcaaaaa gcttatccac
159841 catgatcaag taggcttcat ccctaggatg caaggcttgt tcaacatatg caaatcaata
159901 aatgtaatcc agcatataaa cagaaccaaa gacaaaaacc acatgattat ctcaatagat
159961 gcagaaaagg cctttgacaa aattcaacaa cacttcatgt taaaaactct caataaatta
160021 ggtattgctg ggacgtatct caaaataata agagctatct atgtcaaacc cacagccaat
160081 atcatactga atgggcaaaa actggaagca ttccctttga aaattggcac aagacaggga
160141 tgccctctct caccactcct attcaacata gtgctggaag atctgtccag ggcaatcagg
160201 caggagaagg aaataaaggg tattcaatta ggaaaagagg aagtcaaatt gtccctgttt
160261 gcagatgaca tgattttata tctagaaaac cccattgtct cagcccaaaa cctccttaag
160321 ctgataagca acttcagcaa agtctcagga tacaaaatca atgtacaaaa atcacaagca
160381 ttcttataca ccaacaacag acaaacagag agccaaatca tgagtgaact cccattcaca
160441 attgcttcaa agagaataaa atacctagga atccacctta caagggatgt gaagcacctc
160501 ttcaaggaga actacaaacc actgctcaac gaaataaaag aggatacaaa caaatggaag
160561 aacattccat gctcatgggt aggaagaatc aatattgtga aaatggccat actgcccaag
160621 gtaatttaca gattcaatgc catccccatc aagctaccaa ttactttctt cacataattg
160681 gaaaaaacta ctttaaagtt catatggaac caaaaaagag cccgcatcac caagtcaatc
160741 ctgagccaaa agaacaaggc tggaggcatc acactacctg acttcaagct atactacaag
160801 gctacagtaa ccaaaacagc ttggtactgt taccaaaaca gagatataga tcaatggaac
160861 agaacagagc cctcagaaat aatgctgcat atcgacaact gtctgatctt tgacaaacct
160921 gagaaaaaca agaaatgggg aaaggattcc ctatttaata aatggtgctg ggaaaactgg
160981 ctagccatat gtagaaagat gaaactggat cccttcctta caccttatac aaaaattaat
161041 tcaagatgga ttaaagactt aaatgtcaga cctaaaacca taaaaaccct agaagaaaac
161101 ctaggcatta ccattcagga cataggcatg ggcaaggact tcatgtctaa aacaccaaaa
161161 gcaatggcaa caaaagccaa aattgacaaa tgggatctaa ttaaactaaa gagcttctgc
161221 acagcaaaag aaactaccat cagagtgaat aggcaaccta cagaatggga gaaatttttt
161281 gcaatctact catctgacaa agggctaata ttcagaatct acaagaact taaacaaatg
161341 ttcaagaaaa aaacaacccc atcaaaaagt gggcaaaata catgaaaaga cacttctcaa
161401 aagaagacat ttatgcagcc aacagacaca tgaaaaaatg ctcatcatca ctggccatca
161461 gagaaatgca aatcaaaacc acaatgagat accatctcac accagttaga atgacgatca
161521 ttaaagtcag gaaacaacag atgctggaga ggacatggag aaataggaat gctttttacac
161581 tgttggtggg ggtgtaaatt agttcaatca ttgttgaaga cagtgtggca attcctcaag
161641 gatctagaac tagaaatacc atttgaccca gcaatcccat tactgggtat ataccgaaaa
```

FIGURE 2 (cont.'d)

```
161701 gattacaaat ggtgcaacta taaagacaca tgcacacgaa tgtttattgt ggcactattc
161761 acaatagcaa agacttctaa caaacccaga tgtccatcaa tgatagactg gattaagaaa
161821 atgtggcaca tatacaccat ggaatactat gcagccataa aaaaggatga gttcatgtcc
161881 ttttcaggga catggatgaa gctggaaacc atcattctca gcaaactatg acaaggacag
161941 aaaaccaaac accgcatgtt ctcactcata gatgggaact gaacaatgag aacacttgga
162001 cacagggcag ggaacatcac acaccagggc ctgttggggg gtggtggact gggggagaga
162061 tagcattagg agaaatacct aatgtaaatg atgagttgat ggatgcagca aaccaacagg
162121 gcacatctat acctatgtaa gaaacctgca ctttgtgcac aggtaccta gaacttgaag
162181 tataataaaa atgaaaaaaa gaaaatgtta ctagcaaatt gtagatgggt atacctaata
162241 taactctgca tgtgcactat gtgtctggat acacatggaa agtattcagg catacacacc
162301 aaattgttaa aataaatccc cttccaacat taggagtggc tggggagcag atggctttca
162361 cttccgcaca ttccatggtg ccagggtaat accacatcac aatagtaaat agcaaaaata
162421 acaaccttaa gtttagattt tcttatctaa attttaattc tgtgaagaag tttccatttc
162481 ccttttttcac acaggatagt agaatgcagt ttagaaagag tgagatcact tgttagactg
162541 tacaattttt aagcatcagc gaagtatacc attaaacttc tctatcaatc cattctctaa
162601 acttcccaac ccaaaaaaaa agaaacacat aaaattgaaa tgaagaaaac aatacaaaag
162661 atcaacaaaa atgaaaggtt ggcttttaa agagataaac aaaattgaca aatgtttagc
162721 cagactaaga aaaagagaag gcccaaataa ataaaatcag agatgaaaaa gcagacatta
162781 taactgatac tgcggaaatt caaaggatca ttaatggcta ctatgagcaa ctgtatgcca
162841 aacattggaa aatattgaag aaatagataa attcgtagac acacgcaacc taacaagatt
162901 caaccatgaa gaaattcaaa atctgaacag accaaaaaca agtaacaaga tcaaagccat
162961 aattaaaatt ttcccagcaa agaaaagcct gagacccaat ggcttcactg ctgaattcta
163021 tcaaacattt aaagaactaa taccaatcct actcaaacta ttccaaaaag tagaagagga
163081 gggaatattt ccaaacttat tctatgaggc cattactgct cctatatcaa aaccaaggac
163141 acatcaaaaa aagaaaacta taggccaata tctcacatga atattgatga atcctcaaaa
163201 aatgctagca aactgaattc aacatcacat taaaaatcat tcattatgac caaatgggat
163261 ttatcccagg gatgcaaata tggttcaaca tatacacatc agtcagtgta acatatcata
163321 tcaacagaat gaagaagaaa aaccatatgg tcatgttaat tgatgctgaa aaagtatttg
163381 agagaattaa acatctcttc atgacaaaaa ccctcaaaaa cactggagac agaaggaaca
163441 tacctcaaca caataaacag acatatatga cagactcaca gctagaatca tactaaatgg
163501 ggagaaactg aaagtcattc ctctaagatc tggaacaaga caaggatgct cattttcacc
163561 agtgttagtg gaacatagta ctgaaagtcc tagctagaac agactagaga cagaaataag
163621 gggcatccaa actgggaaga gagaagtcaa attacctttg ttcgcagatg gtatgatctt
163681 ctgtttggaa aaacctagac tccataaaaa aatgattaga actgataaat tcagtaaagt
163741 ttcaggatac aaaattaaca tacaaaaatc agtagcattt ctatatgtca atagcaaaca
163801 atctgaaaat gaaatcaagg aagtaatccc atttcccatt tgcaatagct ataaataaaa
163861 ttaatataat ctcatctctt caataagtgg tgttgggaaa actgcatatc cacatacaaa
163921 agaataaaat tagaccctt taatatacaa aactggaccc aagttaatat acaaaaatta
163981 acttgaaatg aattaaagac ttaaatgtaa gatctgaaac caaaaactcc tagagagaaa
164041 cataggggaa aagctccttg acgttggcct tggcaataat tttttgggat attacaccaa
164101 aagcacagac ttttgaaaaa ataaacaagt aggactacat caaactaaaa agcttctgca
164161 tggcaaaaga aagtcaacaa catgaaaagg caacctacag aatggaggga aatatttgca
164221 aaccatatac ctgatgagaa gttaatatca aaatatagaa aatatataag gaactcacat
164281 atctcaatac caaaaaaata ataacctgtt ttataatggg caaaggacct gaatagacat
164341 ttttttcaaag aagacacaca gatggccaac gagtgcagga aaaagcgttc aacatcacta
164401 atcatcaggg aaatgcaaat caaaaccaca atgagatatc actccacacc tgttaggaaa
164461 gctattatga aaaacacaag agacaatgaa tattggcaag ggcatggaga aaaaagaacc
164521 cttgtacact gttggtagaa atgtaaattg caacagcctt tatggaaaat agaatggagg
164581 ttcctcaaaa aataaaaata gaactaccat acaatctagc aattccactt atgagtgtac
164641 atccaaagga atcaaatcac tatgtcaaag agatatctgt acttccttgt ttattgcagc
164701 tttactcaca gtagccaaga taaggaaaaa atctaaatgt ccatcaacgg ataaagaaaa
164761 tggggggagg ggtgtgcatg tatacataca caatggacta ttttttcagcc ataacaaaga
164821 aggaaaccct gccatttgtg acgatatgaa tgaacccaga ggacattatg ttaagtgaaa
164881 taagccagac acagaaatac aaatattgta tgatctcatt tatatgcgaa tctaaaaatt
164941 tcaaacttga agacgaataa gtagaacagt atttatcagg agctagggga tgtggggaag
```

FIGURE 2 (cont.'d)

```
165001 aagcaaaata ttgggcaaag agtataaact ttcagttatg agatgaaggc caggtgcgat
165061 ggctcatgtt ggtaatccca atactttgga aggctgaggc agagggattg cttgagacca
165121 gcctaggcaa gaaagtgaga cctcatctct acaaaaaata aaaataaaag aatcagctgg
165181 gagtggtggc atacacctgt agtcccagct agtcaggagg ctgagggggg aggatcattt
165241 gaaattggaa agtcaaggct gcagtcagcc aagatagtgc cactgcattg cagcctgggt
165301 gacagagcga aaccctgtct caaaaaaaaa aaaaaaaaaa agatgaataa gttctgggga
165361 tcaaatgtac agcatggtga ctatagttta taactgcgtt attacttgaa attggataag
165421 agcagatttt aagcatcccc agcacccccc caacatacac acacacaaat ggtaactata
165481 ggtggtgata gatatgttaa tttgactgtg acaatcagca ttcaatatat acatatatca
165541 aatcatcaca ttttacccct tgaaatagaa actttgattt gtcaatcaaa tattttaaaa
165601 cgaaaataat cataatatta atatagcata caggaaaaaa tttcgtatct cgactgatac
165661 agaaaatttc atgataaaaa cactttaaaa caaaagaaat aaaagggaac tccctcaacc
165721 tgataaatgg catctgtgga aaccccccagc tagcatcaaa cttaatacag aaaggctggg
165781 tgttcacctc ttgaaccagg aacaagacaa agatgcctgc ttttgccact tccatttgac
165841 cttgtactga ggttctggct agggcaatta tccctgaaaa agaaataaaa ggcttccaaa
165901 taaaagaaga agtaaaacta tctctactcg ctcatgacat gatcttgcat atagaaaatg
165961 tgcacatgta cacacacaca aaccattaga actaataaac aagttcagca agtttgcaga
166021 atataaaatg aatgtacaaa aatcaagtgt ttttctatat actagcaatt aacaatctca
166081 aaatgaatta aaattccatt tacaatagta tcaaacataa attatttaga aataaaaagt
166141 gcactgaaaa ctacaaaata ttttgaaata aatcagaaaa gatttaagta aatggatcac
166201 ttgaacctgg gaagcagagg ttgcagtgtg ccgagattgt accactgcac tttagcctgg
166261 gcaacagagg gagactccaa agagtcgaaa agaaaagaaa agatttaaat aagctgaaac
166321 atattctatg gatcagaaga cttaatattg ttaaagtgac aatattcccc aaattgatct
166381 acagcttcaa ctcaacccct atcaaaatcc tagcttgctt tttggctgaa attgacaagc
166441 tgattctata atttatatgg aatctcaaag gatccagaat aaccaaaaca atattgaaaa
166501 ataaagaaca gcgttggtgg attaacattt tccaatttca aaacttacta tagcactgcg
166561 gtaatcaagc agtgtggcac tgtatagcat gtacattaca gatcagtgga ctagaatcaa
166621 tgtccagaaa taaaccgtta tgtttataat gaattacttt ttaataaggt gtcaagacaa
166681 cgcaatggga aaagaataat gaattcaaca aatgatgcat ggacaaccgg acatgcacat
166741 gcaacacaat gaatttgaat tcttctatcg ctccatgcat aaaaactaac tcaaaatggg
166801 tcacggatgt aaatgaaaag ctaaaactat aataatccta gaggaaaacc taggagtaaa
166861 tctttaagat gttattgtag gcagtggttt ctcagatagg accccaaaat cacaagcgac
166921 aaaagaaatt ggacttaaag ttaaatactt ttgtgcttca aacatcatca agaaagtgaa
166981 aacacaaccc gcagaagcaa taaaaatgtc tgtaagtcat gtatccgatt agagacttct
167041 atccaggata tataaataat gcaattcaat gataaaaaag ataaatagcc cagttttcca
167101 aagagtcaag catctgaata tacatctctc caaaaatata cagatatcca acaagcatgt
167161 gaaaagatgt tcaaagccat ttgccaggtg cacaaaccca agacagtatg aggagatgct
167221 acagggactc tgctgcttca cagacatgaa gcgttggtga gaatgtaggc agccgccttt
167281 ggggacttca catccccgcc gccccacgca cggtgagcta gtgtttaaac ttagccgaga
167341 tcaatacacg cgactgtgtg cccgtcagac cctgcgctgc cggcggggct gggagaggcg
167401 ggcgccagga gtgggcggga acctgggggt caggccccag ccgcgggaag ccgcccagga
167461 gcgcgcgaaa ccttctccac acccttccag gcatttgccc gccgcgattc agagagccga
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167581 ctcccgcgac cactggccat ctctgggcct gggcgcggtc tcggcgcccg cctgcccccg
167641 ccaggagccg caggtccagc cagtgaagaa gcccgcgctg aaggagcctc tgtgctccag
167701 aatccatcct cagtatcagc gctggggtgg cctcctccag gaagcccttc tgattctctc
167761 atgggtcgct cttcctctgc agactcccgg agcacccctg ctccaagtac cgcaagtggc
167821 actgagaact tggggagagc agaggctgtg cctagatttg tagggagtcc ccgcagctcc
167881 accccagggc ctacaggagc ctggccttgg gcgaagccga ggcaggcagg cagggcaaag
167941 ggtggaagca attcaggaga gaacgagtga acgaatggat gaggggtggc agccgaggtt
168001 gccccagtcc cctggctgca ggaacagaca cctcgctgag gagagaccca ggagcgaggc
168061 ccctgccccg cccgaggcga ggtcccgccc agtcggcgcc gcgtgaagag tgggagagaa
168121 tactgcgggg gcgggggcgg gggcggggggc ggggcggggg ccgccggga gcctggagcc
168181 agaccgggcg gggccggcac cgggccaggg acagtggggg aggaggctgc gggctgagcg
168241 accctgaccc cccccagtcc gcgctggttc cgg
```

FIGURE 3

```
   1 gggcgccgag gctccccgcc gctcgctgct ccccggcccg cgccatgccc tcctacacgg
  61 tcaccgtggc cactggcagc cagtggttcg ccggcactga cgactacatc tacctcagcc
 121 tcgtgggctc ggcgggctgc agcgagaagc acctgctgga caagcccttc tacaacgact
 181 tcgagcgtgg cgcggtggat tcatacgacg tgactgtgga cgaggaactg ggcgagatcc
 241 agctggtcag aatcgagaag cgcaagtact ggctgaatga cgactggtac ctgaagtaca
 301 tcacgctgaa gacgccccac ggggactaca tcgagttccc ctgctaccgc tggatcaccg
 361 gcgatgtcga ggttgtcctg agggatggac gcgcaaagtt ggcccgagat gaccaaattc
 421 acattctcaa gcaacaccga cgtaaagaac tggaaacacg gcaaaaacaa tatcgatgga
 481 tggagtggaa ccctggcttc cccttgagca tcgatgccaa atgccacaag gatttacccc
 541 gtgatatcca gtttgatagt gaaaaaggag tggactttgt tctgaattac tccaaagcga
 601 tggagaacct gttcatcaac cgcttcatgc acatgttcca gtcttcttgg aatgacttcg
 661 ccgactttga gaaaatcttt gtcaagatca gcaacactat ttctgagcgg gtcatgaatc
 721 actggcagga agacctgatg tttggctacc agttcctgaa tggctgcaac cctgtgttga
 781 tccggcgctg cacagagctg cccgagaagc tcccggtgac cacggagatg gtagagtgca
 841 gcctggagcg gcagctcagc ttggagcagg aggtccagca agggaacatt ttcatcgtgg
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1321 acgccacagg gggcggtggg cacgtgcaga tggtgcagag ggccatgaag gacctgacct
1381 atgcctccct gtgctttccc gaggccatca aggcccgggg catggagagc aaagaagaca
1441 tcccctacta cttctaccgg gacgacgggc tcctggtgtg ggaagccatc aggacgttca
1501 cggccgaggt ggtagacatc tactacgagg gcgaccaggt ggtggaggag gacccggagc
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1621 tccccaagtc ggtcaagagc cgggagcagc tgtcggagta cctgaccgtg gtgatcttca
1681 ccgcctccgc ccagcacgcc gcggtcaact tcggccagta cgactggtgc tcctggatcc
1741 ccaatgcgcc cccaaccatg cgagccccgc caccgactgc caagggcgtg gtgaccattg
1801 agcagatcgt ggacacgctg cccgaccgcg gccgctcctg ctggcatctg ggtgcagtgt
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2041 accggattcc gaacagtgtg gccatctgag cacactgcca gtctcactgt gggaaggcca
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2281 cacaggcgtc ctgtccacac ccagctcagc atttccacac caagcagcaa cagcaaatca
2341 cgaccactga tagatgtcta ttcttgttgg agacatggga tgattatttt ctgttctatt
2401 tgtgcttagt ccaattcctt gcacatagta ggtacccaat tcaattacta ttgaatgaat
2461 taagaattgg ttgccataaa aataaatcag ttcattt
```

FIGURE 4

```
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  61 acccatcaac ccatcatcta cattaggtat ttctcctaat gctctctttc cccttgcccc
 121 ccaccctcta acacgccctg ttgtgtgatg ttgacctccc tgtgtacatg tgttgtcatt
 181 gtacaactcc tgcttatgag tgacaacatc tgtctgattt tctgtcttgt gttagtttgc
 241 tgagaatgat ggttcccatc ttcatccttg tacctgcaaa ggacatgaac tcatccttta
 301 atatggctgc ttagaatccc acagtataga tgtgcctcat tttctttatc cagactatca
 361 ttgatgggca tttgggttgg atccaagact ttgctattgt gaacagtgat tcaataaaca
 421 tacgagtgca tgtgtcttta tggatgaatg attgataatc ctttgggcat atacccacta
 481 atgggattgc tggacctaat ggtttgcctg gatcctgatc cttgaggaat caccacactc
 541 tcttacagtg taaaagtgtc tctatatata ctcatcccct ccagcatctg ttatttactg
 601 actctttaat catcaacctt cttactggag agagaaggtt taattaccac taatgacgag
 661 cctttaatca aattgttgtt ggacccttcc caacttactt gcgaaggggt catttgtaaa
 721 cttacgccac cttttgatgg ggcagttttt ctcgtttatc cgcaaagatc ctgggggacc
 781 cctttttta actcttttga agaccgttat atctgaacaa tttctcccat accgagaggt
 841 ggcgggttac aacccttgaa agtttctttt tttttttggg gcccccttagt ttcacaaaaa
 901 tcccttcgga ccaatttgcc ttttgttgcc aaggaatttt tcccctaag tcactaggaa
 961 tttttcccag ggcacacagg tgtagtggcc ttccccagaa tttttctcct gggtatccaa
1021 tgttataaga aaaaaaattg gggaattttt ttaaacctcc aataaaattt tttatagaga
1081 taaggccggt ttcatttnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
1141 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnncgc
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1261 ctgtaagaaa catacagtct cacacaatta ggcaaggagt ccaacttgga agaaagagtg
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1441 attcaatgaa aaagtatgta aagtttctat cattctacta cagttggtat tcaacaaatg
1501 ccactttatt cactttctgt taagcctgaa agaagtactg aatgacatca acgagtgcaa
1561 ttcaacaaat ataatttgag cactgattac tcaataagca ttatgaggaa ctaaaatatt
1621 atcagcaaat gatggctgac atagaggaaa tgtgacagag taggaagatc cctgtactcc
1681 ctgtatcaaa ggactgagat tcttccactc aggaccatgt gtgaccccaa cagaaagtag
1741 aaatttacag aaagatacct ggcaaaacac ccaaatagtt tgaagttaaa aaatatacct
1801 ctgaataaca ccccatggaa attttttaaag attataatgt gaattaaaat gaaaacatat
1861 aaccataaca aaaattgtag gatacaggaa aactggtgct catatagcat taactgttta
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1981 gtaaaaaaag gagagcatat ttaaaaagta agcagaagaa caaagataa gcatgacaga
2041 caatgaaatt gaaaatggaa aaatcataga gaagaatcaa atgaatcaaa agtagtttct
2101 tggaaaagat caataaataa aattggttga tataatttac tgatattagg agtgggaaag
2161 ataatcactg atcatagatc catgatgaac aagcttattt caataaatta ataaactcag
2221 caacttcaac aaaatggaca gattacttgg aagacaccaa ttaccaaagc tcaaaaaaag
2281 agaatctaaa tagtcctata tttatgaaaa aaaaaaacaa aactgaattt gtatttaaaa
2341 actttgccac aaagaaaatt ttaggttcag atgggtttcc taataaattt ttcccattta
2401 gtaagaataa tatcaattct acacaaactc attcaaaaaa aaaggagaga gaatacttta
2461 caacacgttc tgcaaggtca gtattaccct gataccaaaa caaaggatat tacataaaaa
2521 cgacaccaat atccttcatg aacatagatt cttcaccacg gggctggaag gatccgnnnn
2581 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
2641 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnatag cacgcccttg agcccctggt
2701 gaatataaga gattaggcta cagcgtgttc tactccaact ttatttgctt tctgagcatc
2761 taattccact ttgcaaatg gacattttt ttccctcttg agagtcagga aattaccagg
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3061 catggagctg tgctgaggaa tctgccattt ttctttatcc agactctgtc tcataccgac
3121 cacaggcccc aatcattgtc tatcaaaaaa catgcttgtg tctcttttgg cttactatga
3181 aaggaagcaa gatctttcc tcaagcattt aagtgttgac tgtgggctac ccagtgtgct
3241 agacactgng gatcaaattc tgtgaggtta aaaataccccc ataactcact ggatagaaat
```

FIGURE 4 (cont.'d)

```
3301 tcaaaatgct cgctatgttg attctatgat caacttccaa ggggaccttt ntacctccta
3361 tcttcatcag caagcaacta cattgatttt gtagcccagg atctattccc acgtcaaccg
3421 tgggtttcaa atgtttgctc tagctcaatg gcctcttaag ccactaaccc aatatgttgc
3481 tttttaccag taaaaaagtg catctgggga ataagttggt gtatatttgt ggttcagcca
3541 gcccatagat cgtccagagg accccaggct taggaggaat cctcagattt gagagccact
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3721 gctctattgt gaagaatcaa agaaagaact cataaatata ccttttgtgc ctgtattttg
3781 aatgtacgtt gtgcatgtaa gcctttgtgg ttaagcaaat gtcaagaaaa tccctagtcc
3841 cattgcttac agtcaatatg gggcaattca agcaaagtat atgcctctaa tatggtttga
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4381 attttatgta aaaaaaagct tagccctttg gtgacgggga ttccttttct ggatgatctg
4441 ccaaagaatc aagacccaac gtccagctta tcaaatttc tctggacctt tannnnnnnn
4501 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
4561 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnccgtggtg aagacttcca cgtgaacttt
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4741 tttatccaat tcactgttgg tgggcaccta ggtcaattcc atgactttgc tgttgtgaat
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5761 tcttttactt caaggtctta tatttaaatc tttaatccat ctggagttaa tttttgtatg
5821 tggcaaaagt taggtgtctt gttttatttt tctgcatatg gctagtcagc tatcccagga
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6481 ttgccatcca tttttgtatcc tgaaacgtcc ctgagtcatt tgttaattcc cagaggcttt
6541 gtggagtctt taggtttttct atttttagaa tctattcttc ccaaagagaa atactttccc
```

FIGURE 4 (cont.'d)

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6601 ctctcttttc ctaatcggac ccctttattt attcctttgc ccaaggcttg gaaagccctt
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7081 tgccactgaa gtgtcagctt ccctgtcatg ggactgtcct tggaatgaca ggttttcctt
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9241 accggagccc ttccccagaa gcctgagcct cacactctgt gttgtctttc tagtgggaga
9301 agttgcagat gacgtccagc gagcgcagga agatcatgtg ctcagtgaca ttccacgtca
9361 ttgccatcac atgtgtggtc tggtccttgt atgtgctcat tgaccgtact gctgaggaga
9421 tcaagcaggg gcaggcaaca ggtgagttct caggctggag caagctcagc atggggggccg
9481 ggatagctca caggagtcct ggggtcagag gattttccag ttagccaaaa acgtctgggt
9541 ttccggagga gggacatcag ttaggaggca ctagcctcct tttttggcatt tcttttgctg
9601 tggtggtagt ttttgaaacc cagtcaggag agttcatatt ctggagcatg agaatctccg
9661 caaactacat cctataaaag caggaagtag ctggacactg tcttccactc ttctttgact
9721 gagcaacatt ggatgagttg tgaatccatt ggtcagtggt gcaggcttgt ggtccccaga
9781 tacttgaggc tgagggatgg aggattgctg aggctcagga gttcaaggct gtagtgtgcc
9841 atgatcacac ctgtgaatag ccactgcact ccagcgtggg caacatagca agactccatc
```

FIGURE 4 (cont.'d)

```
 9901 tcttaaaaaa caacaacaac aacaaaggtc ttcaccaggg atctgcctag gtcagcgagg
 9961 tggttcatca agannnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
10021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnggagtgt
10081 acttcacccc gtggtgaaga tgcggcacag actggcgttt cctacggcgc cttcactgga
10141 aagcgcccct gtggtcctgg ggagagggcg gctccatccg ccacccttcc cggagctgcc
10201 cccgcccatt ctcatgggag gaaatcgcag ggcgtgtgag cccccgaccc ctcgccccca
10261 cctctgccag gaccggccgc atttctgcac tgtcccgccc cactgggaag gaaactctct
10321 ttctcaattt cctttaatga ggacattgtc ttttcagccc tgccacccc tgcaatcgtc
10381 ttccaggctg caaacagcga gtggggaggt gaacacatca gcttttcctc cctccacacc
10441 accaggaaat ttcgcaaacc acttggctct cggcggcctg gcctcgccac acctgtgccc
10501 acagtctctc tccgctgcag cccctgtgc cattctccag gccccacgta cctctgcctg
10561 ggcccagtaa gacctggtca gatggccccc ggctgcaaag ccttcctggg ccccatcaga
10621 gaggacgccc aggtgaagcg agggtcccct gcccaccctg caagcgcagg ggcccttcca
10681 agagtgcagc cctaggccgg tgtgtgatgg tggagacgcg gtcccagagg gcctgaacca
10741 agaatggaga agacaaaggc tgtctttagg gagaaacttc cctgaggggc tgatgtgtgc
10801 gatcccattt taatctcaca accctgggga ggagctgggg ccgggtctca ttgttcattt
10861 gaggacaccg aggctcaggg aacttagacg actttcctag ggtcccccca acccccaccg
10921 gcccagggcc ctctcccagg caccctcat ccccacacag gctcctctaa gctgcttcct
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11041 agaactcaag ggtctccatc cactgtgcca gcacagaggc ggtgctcaga gtggggctaa
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11221 gtgggctgca gcacttctgg ggccaagggc agggtgggcg gcactgggga gtacagggga
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11341 tgtcttggcc aagaagtggg gagggtgggt gtggcaaagg aaacagctag gtcagagaca
11401 agagatgctc tgcaaagccc tgctggctcc ccacggtgga gcatcctatg catgtaggac
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11701 agaggaggag gcactccctg ggacccagca gatggacttg actcagcaaa tagatgcaac
11761 catatgtggg gggtggggag gcccagaaag gcattacagg ccagtgttct taatcctggc
11821 tatacactgg aatccaccag tagccctaaa atataactgt gctggacttc ccctggttcc
11881 acagtttgtg cagagtgggc agcatggagt ctgtaacact aaacacacag gattgagaac
11941 catatgtcta ggctgttgtt agccatgatg gggatacatg aaaaggaggt gcacagttac
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12241 attcctccat ccatccatcc atccatctat ccatccatct ctctgtctat acttccatcc
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12361 ctcactatct gtcatccatc catccatcca ccatccatga atccatccat ccgtatatca
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12601 ctcactacct caccatcctt attattccct ccaaactgtc tctttcacaa gggccttctg
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12781 ggagatggtg gatactgctg cattactaat ccagatgtta ggttttaatt tttctctcca
12841 gtagaccca attgtggtag gagaaaaatg ccccagcttt ggacacaaac agacctggat
12901 tcaaatcctg gttttgccaa tttctgccta aatgacttta ggcaaactcc ttgaccttga
12961 cccttggag actcagtttc ctcacctaga aatggtcaat aatattattt acctcccagg
13021 atggccatga agcttaaaat agattattgt accccccaaa acaccgacac aatgtttaga
13081 aataaataat attattttaa gctttgaagt ctggctgggt tctcagcctc gtctacctgc
13141 tgggtgtgca gactcaaagc cagggtccca ccctcataga ctgtcatctg tgggtgtggg
```

FIGURE 4 (cont.'d)

```
13201 gttggcctgg cactagcagg tgctaatgct cctcagagga ttctaggtgt aaaaggaaat
13261 gaaaatcttt ggaccccaat tcactctgcc aaaagggaaa aattaagctg aaagctgagt
13321 gatgcaagaa acgaagatag ctacagataa aaggtgaaaa cctccacagg tagctcttgg
13381 tgttcacctt atcaagtgct gatgtactaa gcgcaagagg aatacataac tgactattcc
13441 cctacctgct ccttttcttt tgcaacatgt ggattcagta acgtgaccat gccctccctt
13501 tcttccttcc agcctgttct cctttaaata ttgatgccct aaagacatc ttcggaaaaa
13561 ggcacagtcc accaactgtt cctgtggatt tgtgttcctt ttttccgtgt atgtcttttt
13621 ttttattatt atactttaaa ttctaggata catgtgcaca acgtgcagga ttgttacata
13681 tgtatacatg tgccatgttg gtgtgctgca cccattaact cctaattagg tatatctcct
13741 aatgctatcc ctcccccctc tccccacccc atgacaggcc ctggtgtgtg atgttcccct
13801 tcctgtgtcc aagtgttctc attgttcaat tcccacctat gagtgagaac atgcggtgtt
13861 tggttttttg tccttgcgat agtttgctga gaataatggt ttccagcttc atccatgtcc
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13981 gccacatttt cttaatccag tctatcggtg atggacattt gggttggttc caagtctttg
14041 ctattgtgaa tagtgccaca ataaacatac gtgtgcatgt gtctttatag cagcatgatt
14101 tataatcctt tgggtatata cccgataatg ggatggctgg gtcaaatggt atttctagtt
14161 ctagatcctt gaggaatcgt cacactgtct tccacaatgg ttgaactagt ttacagtccc
14221 accaacagtg taaaagtgtt cctacttctc cacatcctct ccagcacctg ttgtttcctg
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14581 ttttgctgtg cagaagctct ttagtttaat tagatcccat ttgtccattt ggctttttgt
14641 tgccattgct tttggtgttt tagacatgaa gtccttgccc atgcctatgt cctgaatggt
14701 attgcctagg ttttcttcta gggtttttat ggttttaggt ctaacattta agtatttaat
14761 ccatcttgaa ttaatttttg tataaggtgt aaggaaggga tccagcttca gctttctaca
14821 tatggctagc cagtcttcac ccggggctga aggtaccgct tnnnnnnnnn nnnnnnnnnn
14881 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
14941 nnnnnnnnnn nnnnnnnnnn nacaatgaga acacatggac acgggttggg ggggtatcac
15001 acactggggc ctgttgggct atggggggct ggggagggat agcattaggg gaaataccta
15061 atgtagatga caggttgatg ggtgcaacaa accaccatgg cacatgtata tctatgtaac
15121 aaacctgcac attctgcaca tgtaccccag aatttaaagt ataataagaa aaataaaaat
15181 aaataagtta aaagagatta aaaaaataaa agagaacatt tgccacattc agtctttcta
15241 gatggaaaga ggttgctgac atatgataga attagaaaat cacacatctt gtaaattctc
15301 atttgtttaa aaagaaatca tacaaattag atgttttttg gagatgactt tttaaaatag
15361 agtcgttaga tcacctctgt aagggatatg tctatatctg ttcagtgggt taggggacat
15421 ggatctggaa agcctgagaa gaaaaagaag gttctatacc agacttgtga tatttagaca
15481 ttttcatatt ctatccattg ttttgtgtgc attttattcc tcactattgt atatatagtt
15541 gacaatgcta aactttttg tgtattcttt ctatgtgttc cgaatgccta atatatgtca
15601 aaattagcgg tagtaaaata atattttgta aatatctttt tgctaaaatt catatgaaat
15661 gttgtttttg gaggggaatg gccaaactac ctgttgagta atactcatcg tgtttgtgtc
15721 ctggttcagg ggaggaggaa ggaggggaaa gtgcagagag ctctatgccg ctgtgtttac
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15901 taaagaggtt gccagtgtat aacaaaagta gagttagtaa actaatatat tttgtatatt
15961 ttgttttaaa attcctagga aagattgtct tcctatcttt gagcattctt gcgcactgag
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16081 tataactatg gttacatgta tgcagtttat tcgagactgc tgtgtatata gtggacaaat
16141 taactcctta cttgaaacac ctagtttatc tagatgttta gaagtgcctg atgtacgtta
16201 aatgtagagg taataaaata ccactttgta aatatctttt tgctaaaatt cataggaaat
16261 actgtctttt agaaatttaa ttgttaagcc acctttgtga gcagtatagt actgtctata
16321 cttgttcaat ggtttagagg aggtgggagg gaagaaaaat atgtgactga cttatttcac
16381 taagcctaat gtctttaagt ttcattcatg ttgtggcatg tgtcagaatt ccttcctttt
16441 ttaaagctga ataatattgc attgtataga tatattacct tttatttatc catttatcca
```

FIGURE 4 (cont.'d)

```
16501 tcaatagaaa cttgggttgc ttccatattt tagctatcat gaatattgct gccatcaaca
16561 tgttgagttc ctgtattcaa ctctttgggt aatacccaga agtgaaattg ctgaataagt
16621 atggtaattc tctgttaaat ttttgaggag ctgctgattc atacttttac gtataaaata
16681 ttagacctta aatgtattat gtaaaaacac taagtatttt taacattcta gagtaaagaa
16741 ggtgtttctt agcaagacag aaaagctgaa accctcaata gaaaagcctt gttaatgtta
16801 tcacataaaa tattcaaaat ttctgaacac acagacacac acgcactaac gaaaagctat
16861 ttacaacttg tggtagatga agaaataatt tcttaacata gcaagaaccc aggcaaatga
16921 ttaagaaaaa gaataatcat acaaatttaa tacatgtgag aagctgttca gcctttccca
16981 ttaattaaag aagtaaaata taaaacaaaa catataattt ttcacttagc agagatgaaa
17041 taccaaaaca gatgggtata ggtgtggaac atacttcctt ggttgacagt tagccaatat
17101 ctattaaaat cccttgccac agtaatttca gttctagaca tttgtcttat attactgtat
17161 ttattctgtc ctgtaaccat aaattccaca gctgcctagt gatggttcta tatttaaatg
17221 gaatgcttac tctcagtatt gttttttctt ttgagatgga gtcttgttct gttgccaggc
17281 tggagtgcag tgccatgatc tcagctcact gcaacctcca cctcccaggt tcaagtgatt
17341 ctcctgcctc agcctcccga gtagctagga ctacaggtgt gcaccaccac gcccagctaa
17401 ttttttgtatt tttagtagag atggagtttc accttgttgg ccagtatggt ctcgatctct
17461 tgacctcatg atctgcccac cttggcctcc caaagtgctg tgattacagg tgtgagccac
17521 gacacccagc cagtattttt tttttaaac cacagcttct tcattttgag tcatctctaa
17581 atagctgcaa tttactataa cttagggttt acaattttta aaattgtgta tgttaaggta
17641 tccacatgat gtttgatata cttcttttga cataaatata cacaatgaag tgattactac
17701 agccaaataa tgattaccat acccatcatt gctagcgttt agaaagacaa ctgattttta
17761 tgtgctgata ttgtaccctg caaccttact gaatttacta aatctagtag tttttttggtg
17821 catcctttgg gattttctat taacagaatc atgccttctg caaatgtaag taatttagct
17881 gcttcttttt aaatatgtat gcctcttatg tcttttttctt ggctatgttc ttttctctgg
17941 ctagaacttc tagtacaatg tccagtgtca gtgttgaaaa tgggcatcct tgtgttgttc
18001 ctgattttag gagtaaagct tacagttttt ctacccctga gtatgatttt agttgtgaga
18061 ttttcctata tgcccttttat catgctaaga aagttccctt ttatttttagt ttgctgattt
18121 tttaaaatta tgaaagggca tttaatttta tcaaatactt ttttctgtgt ctgttgagag
18181 tttggccatt tttttttctat tgaaatggtg tattatggta gctgattttt ggatgtgaaa
18241 ccaaccttgt gtccttggga taaatcccat gtaatcatgg tgtataattc tttctatgta
18301 ttgctggatt tggtttgcta gtattttgtt gggacttttt gtgcccataa gataagaggt
18361 attgatctat ggttttcttt tcctgtgatg tctttatttg gttttttgtgt cagggaaata
18421 gtggcttcat aaaaatgttca agaagtgtac cctcctcatc tttttgttgg aagagtgtga
18481 aaaattggta ttatcaaatg tttagtagaa ttcaccagtg aagccatttg cttttctttt
18541 tgggtagttt ttgattactg attcattctc ttaatttgtt ttaggtctat tcagattgtc
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18661 aaattatctt atttgtcagt gtacaattat ttttggtatt cctttataat ccttttttatt
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19141 atatttgtga atttcccaaa tttcccctgt tgttgatttc taatttttatt ccattgtggt
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19621 gtaacaattt ttgtttttaaa gtctatttgt ctgatatcag tgtactgact ccagtgtttt
19681 tgtggttgct gtttgcataa tatatttttc ctgttctttt actttcattc tgtgtcttcg
19741 aatcaaaatt gtgtttttctc cagacaatat atacttcatg ttttcttatc caatataaca
```

FIGURE 4 (cont.'d)

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19801 cctttgcctt ttgattgcat tgtttattcc attcacactg catattatta tttagtggga
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19981 aggccattct cttgcctcag cctcccaagt agctgggact acaggtgccc accaccactc
20041 gtggctaatt ttttgtattt ttagtggaga ctgggtttca ccgtgttagc caagatggtc
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20161 atgagccacc gcacgcccgg attttttgtt ttttatatgt atcatgtctt tgttgttcct
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20281 tttattaata attttatcac tgtattttta ttttttagtgg tttctctagg attttctgta
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20401 tgttactcat gtagaactta attctcttgc tcttttgtgg ttattttatt tatattatat
20461 caattaatgt tacaaagata tacattgttt aaattattat tggtgctatt attagcatac
20521 ataacaccca catattaaaa ttgtatatat tgcatatatg tattatagaa ttgtatatat
20581 tatagggcca atagtatatt gtatacatgt tattttatat aattgttttt aaaatgagtt
20641 aagaaaaaag aaaaatgcat ttctactgtc tattatagaa aaataattac atcatactga
20701 acgtcttcac cnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
20761 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ncgcggaatt
20821 cctaaaagaa ttgctgagac aaagtatatg tgcctttgtc atcctgaggg cagttgtcat
20881 cctgtggagg tttaccattt gctctcccac cagcaatgta taagcatacc tgcttcccaa
20941 cacttccgcc aacacatatt atttgattaa ttttcttggc tgataatggt atctcattgt
21001 agtttttaatt tgtatttctc attgtgagag aaatgaagca tcttttcatg ttttgagagc
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21601 gttaaaatca tttaaaatgg tgaatttgat aacaaagcca gccactaaaa gacttggatg
21661 tagcaaaaca aattgtcaaa aagtatttat catttctaag aaataaaata aactgggatt
21721 taggcttgga tagaaatcca gaggtttgtt ttggcataat taattacaac atctgaagaa
21781 gggaggattt ttacaagaat ttttttttttt gtagtgagat tgctttatat tccttttcat
21841 gactggagag tctgtcattt ggcaacccgc aaagaacttc aggaacagag ggcctaagtt
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21961 gtcgtgtgtg gtctgatcct atggagagga gagtgtaggt gtnntctctg gagctagtac
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22741 cttgggtccg ctgtcactgt catgctggcc ttgacatctg ctacaagtgc acacacatgg
22801 ggaaccacac agggaagtga acacatgtcc tgacgtgtgt gtgtgcctgg tgtggctgct
22861 tccttgatcc aggctttgtt ttgttacgag gctctgccct cctaccttca ggccttgctc
22921 ctcatcatgg gcatgcaagg atggaatcgt tacccccagag tacacttttt gacttggatt
22981 acttgtagtt tagtactgga gttcagaact ttaatttccc atcagaaacc tgcctcccgg
23041 acccaggaca ctgaccttga ttgggcacga ttttccagat aagaccttac ctcctcccaa
```

FIGURE 4 (cont.'d)

```
23101 cagggtttgc cttcccttca gaatacagga aagtacacgt ggttccaaga ggaccatgct
23161 cttactaaga taaaagggag gagggtgact aggtactttc ctctgctgcc atcccttgaa
23221 ggaagggggc ttccttcaat gcctcatcag ttccagggag tatgcttgac ccagcaacac
23281 agaggaagaa gtgacctcat agcaatgagg ggcaagcatg tggatattgc tgggtatttc
23341 ttcctcaaag tctacctggg gacaggtgat gaagacgctt acttctctgc aatacaccgt
23401 gatcaggctt tggtcttcat gacacatttt agccttgcct atgtgtgttg aacagagctg
23461 gtcatcctca gaaataaaag aagagagcaa taagtacagg aaggctttca gtcccagaat
23521 agtgttagga ctaaatgtca gagaacaggg ggactgtagg agtttgggga ccttagcatg
23581 gataccctct caatctgctc ccctgtggta taaacagtaa agcccattgt actaaaaggc
23641 cttgagtgct tgtctctggg gcaggtggag ccagtgatgg gtgccccgag aggaggatgc
23701 tggagagggg acagtgtcta aggcagttgg agaaaaagga caatggctta tgcagtcagg
23761 cctagaagat gcaagggatg tcacagcata gtgtccacag gcatccctag atgtctttca
23821 ttttgtttca ggaagaatat tgacaaaggt agtgatggga gggttatttc aaggatgcta
23881 ttttcatgtg tccaagtaaa cttaagattc ctaagaactt tgacctctaa tgcttttaaa
23941 gaccgtgtac ctcatgccca tatgcacatt cagttagaaa ataaatgtag attctttggt
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24061 ctgatgagag cttcttggat cttgtttctt caggtggact tgcattaaag tgctgttgaa
24121 tctctgcact gggagtggga gcagccatgc gatgggtgcc ttaatccgag tgccatcctg
24181 gctctctcca ggctgcttca tttgctgtga ggggtagggg gaggaggagt ttccaggcaa
24241 tggccttatc tgttctggtg gttgaccaag ggtcgggggt cccaaaggtg gagttccagg
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24421 tgggcctgca gaaggtgggt ggtgatatgg cctttctggt gataacagac tcgtggcact
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24541 ggagggaaga atgctttttt atgaatacgc ataggtctgt ggggctgtgg agcctgggga
24601 atccgaggct ggcgtgggag tctggggccc tctagcggtg gtggtgcatc ctcagctcag
24661 tgccactcac tgtccctatt tctctctgtc catttctctc ctcactgcag tgcttcctct
24721 ccttcctaga ttttttttctc taagtttgac tattcaccac cccagagact ctgttctatc
24781 ccatgacctc ttgctgtact ttctttcaaa tctaaatttt cttgattatt tttcttaatt
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24961 tggcagggca gtgaggtttt gtggaactca gggagcatct ggcactatgt atgaggttgt
25021 gaggtgggag agagctctta aatctaccag ccttgttgat cttgggaact aggagagagt
25081 gctaggaag ccagtgccag caggcctgga gcctcatatt tctttggcat ttgtatgata
25141 ccttctagta cttcgttttt tgacttatat atgaactaac tcaatttaga tgcttagaaa
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25321 tagaaggatc taatatgtgt tactcgttga gcagcgggaa gcagcagaca tttctagggt
25381 ttctccctgt caccattcag gagacagtgc acacaatccc cttggctctt acctgaacac
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25621 tcttgaattt ccatttgctt aatcaatctg cctttggtct aaacagttgg cgagttttat
25681 gtgtggtttg ctcaccaagt tacccatgct agtctcattt cttcactatg atgtctattc
25741 tcttttaaaa ttgtttttac tttctgtgct tttatcccac tgttctgcat gcagttccag
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25981 taagaatacc aaagccagaa gaacactaaa gttctcaagg tccctcaatg atgtgggtga
26041 gaaggcgcag gatacttcag aaagttttgc ctatgtggaa agaacttgtt ctgaagggaa
26101 attaatactc cctcaagata cgtgtctcag aactaacagg tttcatcata aagaaaaaag
26161 aaccctgaac cacaaacctc ttggcaattc caaacattct tgtgtttcat gcctttctgc
26221 cggtcgctca actgcctcag aggtggaagc tggcaagggg gcaggcccg cctgctgct
26281 ggaagagaag gcggatggtg aggccacgtc ccgaagccgg caactgctcc agtacctgtt
26341 ctcactctcg cacggcttga gcgccagcag cctgcacagg ttccatgagc tggagagctg
```

FIGURE 4 (cont.'d)

```
26401 cgctgctcgc ctgcacactg ccaagtcctc cagcgggctg gcagggagta tgggcttctg
26461 ctctgacgag atgggagacg acgatgtctt tgaggacagc acatctgcaa aactgaagag
26521 tagggttctg cgggcgcccc tctgctccac ggaaaaggac agcgacctgg attgtccttc
26581 tcccttctct gaaaaattac cccccatatc tcccgtgtcc acgtcagggg atgtctgcag
26641 gttggtttgc caggaagtgc cattctagcc atctctgctc gcatcaggaa cctcctcttg
26701 ctttagtatg tgaagtttca ggaaaatgaa gtaataggaa gttgtaacca gttgtgggtt
26761 gatggttttc tccagaagaa tggagtatca atatcgtttg aaaaacttaa tttttatgat
26821 gtgagtccca agatagtttt acaaatgata aaagaggaag aagctggctg ggcgcagtgg
26881 ctcacgcctg taatcccagc actttgggag gctgaggcgg gtggatcacc tgaggtcagg
26941 agtttgagac cagcttggcc aacgtggcga aaccccgtct ctactaaaaa tacaaaaatt
27001 agccgggcgt ggtggcgggc gcctgtaatc ccagctactc aggaggctga ggcaggagaa
27061 ttgcttgaac ccgggaggcg gaggttgcag tgagccaaga ttgcgccatt gcactccagc
27121 ctgggcaaca agagtgaaac tctgtctaaa aaaaaacaaa acaaaacaaa aaaaaaaaga
27181 ggaagaagct acacatatta aaggccaagc tgactcttct aaactaaaaa taagtagact
27241 ttgcataaag aaactggaag aaagaaacta gtatcttcag ttttccagcc tgatggtcca
27301 gatttttaagc attgttgcat ctcccagcct cttttttaac ccttgctccc tacctacccc
27361 caaaaggtgt gtggggactg gctgttctcc agtagctcct tccttccttc tttttaactg
27421 aggtgtagcc acctatgtcc catcctaact ctgtttcccc cctttatctt cccttgtgca
27481 gcatccttgt ctggcctcca taattcactt tttgtcatga ctcttgtgcc ctcctcattc
27541 tgacctttct ccagtctccg ctccttagtg ccagctgtca tcatttctaa catttggatc
27601 agagatcccc tcactaaaac agcctgagag cctggctcct tccaggacga gtgccccaac
27661 ctgttctcta gctgctggaa aagacccctc tgtttcttaa aagcctgtta agttccttca
27721 ggctagtagc tacaccttgt tgcatacttc cttggaaata gagagtgctt tcaaattaat
27781 ttctcactta ttgctattag tggtcccaag aaaaagagat gaaattgcag catcttgtaa
27841 tggtgagttt tttaggtcta ggagagaggt actgtcatct ttgtttactt gctgagagac
27901 gacagaaatg tgtagttgtg gggtatgaag gtaaagtcag tgattatagc taaaaagcaa
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28021 agaacccgct gggagggcca agaccatccc gtgcgcggcg ggaaccgcga catccgccac
28081 tcggatgccc gctggagcgg gcggagaccc acgcgcgcgc caatgtcccg gcgcgcgggc
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28261 cgccactgcc tactgccagg ggcggcgggt gacgacaaaa ccctcggtgc gccgcgcctg
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28381 aaggtgagag ggccgtggcg cccgggcgct gaccactatc attctccgcc acacggacga
28441 aggcaggagc accacgggcg gccggcgggc cgccgctcg ggccaaagag cccgcccgcc
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28561 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnngagg ccgggcgagc
28621 gcaggcgggc ggagagcaga ccacgcggaa gaggccgaga gagaaagcgg ggcacccggc
28681 cgggggggtc atttacaagg gacgctgggc acgaaggagg ctggggcgaa gatgagtcca
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29041 agccggggag gtggaagctg cagtgatctg cgccactgaa ctcccgcctg gcggcagag
29101 tgagaccctg tttcaaaagg caccagggt gtagggaagg agcgatatcc cccaggcaag
29161 gaaggctgcg gaggggccag gccaggagag aagggccctg agctcagtgg acgggcaggg
29221 tgcctgtgga ggaagggagg gacgtagcag caggaggaag ggtgaggacc caggctgggg
29281 atcgggagaa gtgatggcgg aggaaagaga ggccggaaga ggaggggcc tgctggcctg
29341 gcactggaaa gcaaagcgtg ggtttgtata tgggaagaag accacatccc ctcttatcgt
29401 catcccaact cagaaaccat ttggccccaa gtcaccaaag cactcatagg aaccacttt
29461 cctgtgacac aagtaggatt ctcccacttt taacttccca aatgctaccc gaaagcctct
29521 gaaatccttg gaaatttaaa aaataatccc cttctattaa ctgatgccta taaaacatat
29581 tgactttcat taaattttgt tatgaaatca gggatgtgtc ccattgtaaa ataaatttgt
29641 ttggaaaatg tagggtggta tcccatctaa aaatcagacg aggctagaaa atttcaattt
```

FIGURE 4 (cont.'d)

```
29701 tatttgctaa ggtagcatca tgttgttaaa aatgcatcat aaaataagac caagagttaa
29761 tacaaagcat gaagtcatgt ttccctcaaa aaaatgattt gttctgtagt caaattaatt
29821 tggaaaacat tgcaaactct tcagcagtgg ttctcaaagt atagcttgcg tcagaatccc
29881 ctggggccct tgctaaaatc tggatggcta cactccccgc ctagagtggg ttaaactcag
29941 tgcccactgg caggaaactg aaacttggct gaagtcaccg aggaggcctt ccccgttaaa
30001 cctctggctg gcgacagctt ggtttcctcg ccgctgcttc tgagtaattc tggcacgcag
30061 ttcctcctag ccacctgctg tacctggaag ggggccagcc ctcctcagca ggctttgctc
30121 ctgccctgca cagcacaact gtggcgtaaa aaatggaaaa gctggtagca gaaggaaaga
30181 gcagggagac agaggttagg tgaacctcaa tggcctcatt aaagcaaatt gagaaagaga
30241 gtttccttcc cagtgaggcg ggacagtgca gaaatgcggc ccgtcctggg agaagtaggg
30301 gcgaggggtg gggggctcac cgggcacatg gccaacagct ggtgcccagc ctgggccaca
30361 gtttggcaca ggagaaagct gaagatgcag gagaaagcta ggtcactgcc cctaggccag
30421 gtgatcaagg tggctgttac ctgcctgtgt ggccttgaaa aagcctggtg ccctctctgg
30481 cttgcaggt ccttctтttt acaaaagcgg gtcttcgaag ccctgaatat tccagttatc
30541 tgtaaggata tagaaatatt ttgcctctag atgacatgta aatatgttcc tcctaactcc
30601 acttcttcct acatctgtgg cttcttctga gaactaccag acccaccctg ttttcagagt
30661 aaacctcctg ttttgaggtc aaacagaccc agctgggtaa ttggtgactc actcctggtt
30721 cctccaaaga acaggggcaa gggaccaccc gggacctcag gtgccccagc acaggacctc
30781 tttctggggc accctctggc actgggccat cttcaggccc tacagggctc tcggggcctg
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30961 gaggggtgct ggggggaggaa ggaggcagca aggctgaaag aagcttctct gggtattcca
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31081 ctgtgtaaaa gcccctcctt ccccacaagg ggctggatcc aagtgaagaa ggtaccagaa
31141 ggactggaag atgatgctgg tattattcga cagctccagg gtgctgtagc actgagcacc
31201 tactgtatgc agcccatcac aaagccagcc acactgccca ggctgtgcca tggcaacttc
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31381 tggcctccta ggagacccag ggtagccagg acaaaggaga gaagcatttg ctaagctaag
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31681 tcaggaggat gtggggaggt ccctgactcc ccagctttcc ccatgacaag gtgtgtgtct
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32881 cttagtacct gcagcctgca ttctgaattt agcaagctct ggccttgggt ttctattttc
32941 ttgtcctgtg cagtgagcat ttggaaactt ctcctcagca ccaaacacgg agccatttag
```

FIGURE 4 (cont.'d)

```
33001 cagaaaatac atgagttttc aagtcaattg aactgttcat cgccccaaaa gccaggcaac
33061 acggtagagc agctggatct ctgttcgtag aagctttctc agggactggc ccaccgagtg
33121 ggggactgca agtgcccgat gagtgaatga atgaacacat gtgtgaatgg aattcaaggc
33181 actgcaggct attctggagg gtactggcct gtctcttcga caggtgaggt gcagtagaac
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33421 gagaacctgt tcatcaaccg cttcatgcac atgttccagt cttcttggaa tgacttcgcc
33481 gactttgaga aaatctttgt caagatcagc aacactattt ctggtgagtg tgcctctggg
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33601 tgacaagggc cttcctgcct gctgcagcat gggggcctcg ctgccaccat gccaccctgg
33661 acagcacccc ctacactcca caccttttac catcactgtg gtcacccttg tgcccagagg
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33841 aaggcagaac ttggcttgtg ttttaggtat ttacacaaaa gcaactttgg gttcctttgg
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34021 aaacttggca aactgccccc agggactctc ctccacgccc tccttcttcc atcctggaca
34081 ctccatgctg ggctgaagga cctgagtgct ccaggaggct tctgagccac gaagggccag
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34741 agtctgggaa cataatgtca atattttcac tatcagtatc aataattaca ggagctaccc
34801 ttgattaggg gcctgtggtg ggacaggcat tgtgacaggt gctttacaca caaggtcatc
34861 agttgtcacc caccttgcaa aggggagaac actggagaaa gaagcagacc ttgtgtgaca
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35041 gctgcaaggc tgacctagtc ttgagacaga agaagttcaa accaactcca cctggatctg
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35581 ttaagccata tagaatccta gaattggaag actctgagca gccatctctg cacccagcag
35641 ccaaggagtg gccatcctca gcacctggca gggcatcagc ctcccactgg gagtcccggc
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36061 agaactctat tggctcaggc aacagtaaaa agcaatgcta actcatttgg accagggct
36121 cagatcatcc cctgcactgt ctctctctcg ctccatgtct caatcctctg cctctggtga
36181 ttttttcctt aggagggttt ccttatgtgg aggtaaaaaa tgatcaccgg cagcttcaga
36241 tttaccttcc accagcttag caaacaccac ccactcccag caagaaagac cctgtttccc
```

FIGURE 4 (cont.'d)

```
36301 aatgctccca gcagatgtct taggccatcc tcgggcctca ctgattctgt gagccagtgc
36361 ccacggccag gagaatggaa tacactgacc tagaggggac agggactcta gacaggcaaa
36421 aactccactg tcagaagcag aatcctaaaa tgtcagaact gaaaggtagg cccgcccctc
36481 gttttccaga aatatgaaag ggaggcttgg gataacagag aaatgctgca ggcattggcc
36541 ccaaatctca ggcctcctat tcccagtatc accttcacca gcctgggtgg tctcaagatt
36601 ggattagcag ccattccttc tgggtagagt ctgatggtca cttcagctct caaagtccag
36661 ctatccagcc atagtcctag aaggcaagac atcactgtgc ccgaccaacc caagggtctc
36721 cacctgcccc cctcaacaca aggtgccctg agtgcctccg cggggatagt ccccgtcccc
36781 acccctgctt cccccgccca tcgcgacaga tgctcagagc tcatccctgg tgtcacacca
36841 cataaaggag gagggcggtg gccaggctcc gagctcctgc cgtcctgggt gggtggcttc
36901 tgtcctgcgt gccgccgggc agcccggggg tcctgcgcgc gggcgcggtc ggtggagctg
36961 caggggggcg ctctgggatg tctccaggca gagtagatac tgacccctcc gcagccggga
37021 ccctcaccct ttccttcatc actcaggaaa cagaaaaggc ttcagaagga gcggccatgc
37081 ccccggccta agcgctgcgt tcccggccca gcaggcctac cctgcacctg gcgttcctag
37141 gggcccctct gcgggaccca ctgcgcggct cgcagcggcc gcccgcctcc cacttcaccg
37201 gcacgctcgt tgcgtgtcga ggtgtgttga ctcctacagc aaagggcacg gatccgcggg
37261 tcagcaagcc cgacgaattt acaccaatga cccgccgtgt cgccagtctc agaccagggc
37321 acaacacgcc aaccctgcag accacccca cctccccagc cactgcagac ccttcccct
37381 ctgcttctgc agcacctgtc ccgaaacacg ctcattcccg cccccgcaga ccttccctac
37441 ctcctggaga cccccctcaa cccctgtaga gtccctgcc cgtgcagaat ccctccccc
37501 ttccccgca gccccctac cccaccggc ggacagcccc gctcgcttcc tgttcttctc
37561 ccaagggaga ccctgtcct ggctctgact ggggttgagt tcgccagttt tgacttatgt
37621 gtagagtctt caccacgggc tggaagtacg gtnnnnnnnn nnnnnnnnnn nnnnnnnnnn
37681 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
37741 nnnnnnnnnn nngagcgtac ttcagcccgg gtgaagattc cttacacctt atacaaaaat
37801 taattcaagt tggattaaag acttacatgt cagacctaaa accataaat ccttagaaga
37861 aaacctaggc aataccattc aggacatagg catgggcaag gacttcatgt ctgaaacacc
37921 aaaagcaatg ggaacaaaag ccaaaataga caaatgggat ctaattaaac taaagagctt
37981 ctgcacagca aaagaaacta ccatcagagt gaacaggcaa cccacagaat gggagaaaat
38041 ttttgcacct actcatctga caaagggcta atatccagaa tctacaatga actcaaacaa
38101 atttacaagc aaaaaacaaa caaccccatc aaaaagtagg caaaggatat gaacagacac
38161 ttctcaaaag aagacattta tgcagccaaa aaacacatga aaaaatgctc atcatcactg
38221 gccatcagag aaatgcaaat caaaaccaca gtgagatgcc atctcacacc agttagaatg
38281 gcgatcatta aaaagtcagg aaacaacagg tgctggagag gatgtggaga ataggaaca
38341 cttttacact gttggtggga ctgtaaacta gttcaaccat tgtggaagtc agtgtggcaa
38401 ttcctcaagg atctagaact agaaatacca tttgacccag caatcccatt actgggtata
38461 tacccaaagg actataaatc atgctgctat aaagacacat gcacacgtag gtttattgtg
38521 gcactattcc caagagcaaa gacttggaac caacccaaat ttccaacaat gatagactgg
38581 attaagaaaa tgtggcacat atacaccatg gaatactatg cagccataaa aaatgatgag
38641 ttcatgtcct ttgtagggac atggatgaag ctggaaacta tcattctcag caaactattg
38701 caaggacaaa aaaccaaaca cctcatgttc tcactcatag gtgggaattg aacaatgaga
38761 acacatggac acaggaaggg gaacatcaca cactgggcac tgttgtgggg tggggggctg
38821 ggggagggat agcattagga gatataccta atgctaaatg acgagttaat gggtgcagca
38881 caccaacatg gcacatgtat acatatgtaa ctgacctgca cgttgtgcac atgtacccta
38941 aaacttaaag tataataata aaaaaaaata aataaaata aaaataaaa gaaaatgaag
39001 aaaatcatgt catttgcagc aacatggatt tggctagagg actttatcct aggcaaacaa
39061 atacagaaac agaaatcaa ataccacata ttctcactca taggggag gtaaacactg
39121 ggtactgatg gacataaaga tagcaacaat agacactggg gactattggg gtggtgaagg
39181 agggaaggga gaaagtgttg aaaaactgtt gagtactatt ctcagtatct gggtaatggg
39241 accattcata ccccaaacct caacatcaca caatataccc aggttacaaa cttgcacaag
39301 tgccctctga atctaaaata aaagttgaaa aagcaaaaat aaaacagtaa acaacaacaa
39361 caacaaaaca gcaaaacct caataaatac ataaataaaa atataaataa atgtctttgc
39421 cagagctttt tgttttttgt gtggctttga gttagtatct ggggtcacgt tgcttttaag
39481 ctgtttgcta tcaactgcat cctatctaat atttctttt cttaatagta aaccactcaa
39541 ttttttgtgag gagatattac attgtggttt tgatttacat ttctctaatg atttcctttc
```

FIGURE 4 (cont.'d)

```
39601 cagtttggat gctgagcatt ttttcttatg ttttttgccc attcatatat aattttaaaa
39661 gaaatgtcta ttcaaatcct tttgccattt taaaatcata ttatttttaa atattgtgtt
39721 gtagaaatta tttatatatt ctggatatta actctttatc agatatataa tttactaata
39781 ttttcttcca tccacaagtt tttttaaca ttgttatgtc ctttaatgca taaaagtttt
39841 aaaaagtttg atgtagtccc aattgtctat tttttctttt gttgtctgta cttttggtgt
39901 catattaaaa aataattgcc atatcccctt attctaagag ttttatagtt ttagatcttc
39961 catttaagtt ttaaatccat tttgagttaa ttcttgtata tggcataaga caaagtttca
40021 acttcactct ttcatgtgtg gatatccaag tttcccaaca ctgtttgttg aagagaatgt
40081 tcttccctca ttgagcggat ctggaatgct gtaaatatta tttgaccata tatgtggagt
40141 tttctttaa tgggttcttt attctattcc attggtctat atgtctctct ttaagccagt
40201 gtcatgctgt tttaattact gtagtcttgt aacatgtttt gagatcacgg agcatgagac
40261 cttcaactca gttagttttc aagattgtct agtcagagta tatatgaata tttagataaa
40321 ttttctctt ttttcaaaaa atgcagctta gattttgata gggattacat ataatttgta
40381 gactgctttg ggttctattg acttttcaaa ttaatacata atgttgtaca gatttgggga
40441 atacatctga tattttggag atcttaacat taaatcttcc aatccatgaa taccaatgtc
40501 tttacattta tttgtgactt ctttcagtac tgttttgtag ttttcagtgt acaagccttt
40561 tatttccctg gctaagttta ttcctaagta ttttactatt tttgatggta ttgtaattaa
40621 attattttct taattacctt tggattgttt atagttaatt tatagaaagg caactgattt
40681 ttgtgtgtcg attttggatc ctgcaacttt ccagaatttg tttaatagtt ccaacagttt
40741 tctggatttt atgcatatat gcatctaaca gttttctaga ttttatgcag gagtctagga
40801 ttttatgcat ataggatcaa gtcatctgtg agcagagata attttacttt tttctttat
40861 tctttggatg tcttttcttg cttaattttt ttttcctaat tggtctgctt ggaaattcaa
40921 atactatatt gaatagaagc gaagagacag agtatacttg tcttgttcct aatccagaag
40981 aaaagtttga atcttttacc attgagtgta agtttacctg tggattttc atatatggcc
41041 tttattatgt tattttcctt ctattcctag tttgctgagt gttttcgtga taaaaggtgt
41101 taaattttgt taaacatttt ttctacatca atataaatga tcatgctgtt ttgtcctta
41161 ttctattact atagtgtatt acattgattt ttgcatgttg tattattctt ttttttgag
41221 atgaaatctc attctgtcat tctggctgga gtgcagtggc atgacctcag ctcactgcaa
41281 catttgcctc ctgggtcaa gggattctcc tgtctcagcc tcccaagtg ctgggattac
41341 aggcatgagc cagcacaccc tgccacatgt tctatcattc ttgcattcca ggaataaagc
41401 caacctgatc atcacaaata ttggtctgta gtttctttt catgtaatgt ctttgtttga
41461 ctttgaaatc agggtaatac tggcctcata taatgagctt tgaagtgttt tttatattca
41521 tttttgtaaa tgactttgag aaacattggt tctaattctt ccttaaatgt ttggtagtca
41581 tccggttctg ggctgttgtt tgtttggagg tttttgaacc agtttaatct ccttcgtagt
41641 tataagtctg ttcgttttt ctacttcttc atgattcact cttattaggt tgtatatttc
41701 tagaaattta tgcacttcta aattatccaa tttgttgaca tataattaac tgttgatggt
41761 attttcttat aatccttttg atttctatgg catgggttct aatgttctct ttttttatttc
41821 tgattatta gttgaatctt ttttccttag ttaatctagc taagcatttg ttaattttgt
41881 tggtgttttc aaaaaccacc tcttagtttt gttgattttt ttctattgtt tttatattct
41941 atatttcatt tatctctgat ttaatctaat ctttaggatt ttcctccttc tgctagcttt
42001 gggtgtagtt ttttttctct cctagtttcc tgaggtataa agttaggttg ttgatttgca
42061 aactttcttc tacttctttt ttttttttttc ttaagttgtg gagatggggt cttgctttgt
42121 tgcccaggct ggtctcaaat tcctggcctc cagaagttct cctccctcag cctgtcaaag
42181 tgctgggatt gcaggcatga cccaccatgc ctagccactt tcttcctttt ataatgcaca
42241 tatttatagc tataaaattc tctgttagca ctgcttctgc tgcatcttac acattttggt
42301 acattgtatt tttatttttcc tttatctcaa gatattttct aacttccctt gtgatttctt
42361 ttttgaccca ttgcttgttg aaaactgtgt tgtttaattt tcacatattt gtgaattttt
42421 tgtttttcctt ctgctactga tgtctagttt tatgtcattt tcatcaaaat agatattttg
42481 tataatttca atcttttaaa atttgttaca agtttttttg tggtataaca tgtgatttat
42541 ctttgggaat attccatgta aacttgagaa aaatactatt ctgattttat tgggtggaat
42601 gttctgcaca tgtttgttag cactatttat agtgttgttc aagtactgta tttccttatc
42661 gattttctgt cttgttgttc tagccattat tgtaagtgag gaattgaagt cgcctaccat
42721 tattatgctg tttatgtttc ctctctgatc tgtcaatgtt tgcttcagat atttaggagc
42781 tctggtatta gaggtatata tatttgtaat tgttatatct ttctgctgaa ttgacttttt
42841 gttatataat atccattttt ttgtcttgtg actatttttg actttaagtc tattttgttg
```

FIGURE 4 (cont.'d)

```
42901 gatagtagta tagtcacttc tgcttgcttt tatttaccat ttgcatggca tttacttttc
42961 cttttttttca ttttaagcat atttgtttct tagacctaaa tgacaggata aagttggatc
43021 cttttttacaa atccattttc cagtctatat cttttgattc aggagtttaa tccatttaca
43081 tttaaagtaa ttactgatag ggaaggacct acacttgcca ttttgttgtt tcctgtatgt
43141 tttgtaaatt ttgtttttta ttccttctct tactgaccttc ttttgggttt tgtcgatttt
43201 tttttgtggt gacatttttga ttcccttcct gtttcctttt gtgtgtattc tatagatttt
43261 tttatggtta ccataagaat tataaaaaac atcttaaagt gttaacaagc tattttaaac
43321 tgttaagaga ataacttcga ctgtgtacaa aaactatttc ttcaaagctc ctaccctcac
43381 cttaggttac ttatgtcaca agttacatct tcatatgtaa tgtattcatt aacacagttt
43441 tatagttatt tttaagcttt tgtcttgtaa attctataca agaattaaaa gtgcatttat
43501 gtaccaaaac tgcatagtac agtctctata tatgtccata tatttatctt tactggagag
43561 ctttatattt tcataagact tcatgttact atttagcatc cttttgtttc aacttgcaag
43621 atactacagc aggtccagtg gtaatgaact ccccagtttt tgttcatcct ggaaaggctg
43681 attttttcctt tatgtttgaa ggatggtttt gctggatata atattttgg ttgaaatttt
43741 cttttctttc agctctttga atatattatc cccctgcctt ctggcctgca aggtttctgt
43801 tgataaatcc actgataatt ttataaaggc ttcctttac atgacaagtt actttctttt
43861 gctgctttca agattgtctc tttgtctttg acttttgaga gtttgattat agtgtgtctc
43921 actgtgagtc tctgggtttt ctttaacatt ttttttttgt tcatatcttc tgatgatgaa
43981 ttccttttaac ttttatattt gtgaaatgtt ttttcttcat tttcagaagg tattttttagt
44041 gagtgtaaaa ttctacattg acagtttttt tctttcagta ctgtttagtg tttctctact
44101 gtcttcttgc ttgtactgat tgtatagaaa ctctgctgta attcttatct ttgtgtctttt
44161 gtacttaatg tgccttttta ctctgcctgt ttttaagatt ttattttat tattgatttt
44221 gatcatgtgg cttggtgtga gtttcttcat atttattgtg cttggggttc attgagctta
44281 ttaagtctgt aggtttatat ttttcattac atttagaaaa attgtagcca ttattcattc
44341 aaatttttttt ctgttcttct cccatttctc atgcccttat ggggtctaat tatatgtata
44401 ttaggctatt tgaggttgtc ttacagctca cttacagttc ttatgtttat ttttccactt
44461 ctatttcatt tgggcaggtt tattatactt ttccctaatt tgctaatttt tttgcaatgt
44521 ctaatccact gttaatctca tccaatgtat tattaatttc agacattgta gttttcatct
44581 ctagaaattg ttcatctttt tatatcttct ttgtctctat ttgatatgct aagtcttttc
44641 tctagcttct tgagcatatg aaatatagtt atgacaacta ttttatttta ttacaacttt
44701 taccttaggt tcagaggtac atgtgcaggt ttgttatgta ggtaaactcg tgtcacagga
44761 gtttgtttat tatttcatca ctcaggtact aagcctagta cccaatagtt gttttttctgt
44821 tcctctccct tctcctaccc tccaacttca agtaggcccc agtgtttatt gttcctctct
44881 ttgtatcact actattttaa tgtctctact agttctctta ttttttgtcat ttctgagttg
44941 atttttatttt tctcactatg gccatattct cctacttctt tgaatatctg gtatgcaaat
45001 tatacctagt atggatatta tatcaagacc ctgtcgcaat atggatacct aaaagaaaat
45061 aacaatgttt accagtttgc tctaagcctt tcttagctct tttgcttgtt tctcaagaac
45121 aagcacagag ggtggagctc aaccaagact gaagttaaag atgtagaaag attgagatgg
45181 gaagtaatta agttgaggag ctctgataca atggtatttc tctttttaat catgtaagat
45241 gcaagcccaa gataatatgt tgggaaagtt gaaggcgaat gtcttgagaa atatgaaatg
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45361 agctggtcct tgctgaggtt aggggatagg cctggaaaaa ttgagcagtg gtattgccca
45421 ggcaggactc ctcatgacat tctccagatc cctaagtttt tccaagtttc caagcatttc
45481 cttggccagc aagtcatctc gcagcacaga tcctactctc tttcagtcag tcattccaca
45541 actctacaaa gcattttct ccatcaaatg ggaactttg gggttctgca taatttttca
45601 gggttccacc acttttgact ctttctggat accttgtaag gatattataa ctctttaatt
45661 catgtccttg attttctctt ttaacttta atactgttca ttgcctgttt acctctttca
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45781 tcctcgaatc tcagttctcg ggagtaacat atacaattca ttcttacttc cagtctttta
45841 ttcctaagtt ccttatctct agttctcttg catatttgtg gcaattatta gttttttttcc
45901 aaaaatccat tctcccttttt tcctgtacat gtatctttcc agcttgacca catttcccag
45961 cttccctggc agctaggtga agcaatgtaa ctaaactttt gcctgtaaaa tatgagcaga
46021 agttatgtgc acaatatctg cctcacttgc ttaaaataaa ttgtattatt tgagctttct
46081 atattgtccc ttttttacaac taaaatgtag aggttatggc aactttttatg gtaaagagaa
46141 tcatcacgta ggagatcaag aatcattgat ttgagaggaa cctaaatcct ttaatgactt
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FIGURE 4 (cont.'d)

```
46201 agtggagcaa gactgcccca tcagtctgga agctacccca caacttatgt atatcttcag
46261 attgttgagc aaaagagaaa aaatgaagcc actatatatt taggtctctt catgttaaca
46321 gtttagcttt taacctaaca cacatttatt cctgaatggt agcatattat taacatcaca
46381 ggaagggaat tccttgttca tggatctttt attttgttga aataaaggta atctgcttgg
46441 gcttaatact gccaaggcag aatttttttgg aataattatt tctatagatg acccattcat
46501 aatgacaact aacatggttt ctaaaatgga ttcatgtacg tcatcttatt tagtccccgc
46561 aaaaattctg aaggtaggta taattattcc cattctatat attgaaaaat tgggattcag
46621 agagactacg gacttataca agtttctgca gctatttaag aaacagagta aagtctcaaa
46681 gccattaatg aactgtttag tttagtgctg cttagtaaaa ttagaactgt ttgaagtgcg
46741 ttttaatagt aaacccatcg atatttagtc agctctctgc ttgctaacta atatggaaga
46801 aaaaacatac atctacgtac atcctgaatt gggagaaggg aaataaaata ttgccaatcc
46861 cctttcctgt attaggtact gtgataaggc gataaggctt ttcattatta taaatgagtc
46921 ctggagaggt taagcgcagt cacccaaagt cacatgacca gtaactttca gagattttac
46981 cccaggtctg gaaagactct gaagcccatg ttattgcctc cagagcctgg tggagaaccc
47041 ctgaatggga cagagactca gcagacagag tggtcctttc cttccaggga gtcagggaag
47101 gtttggtagg ggagatagag ttagatctgg gtgggatttg gatgaaatga gatcaagcag
47161 ggataaataa gatccaagct gtttatgagg gacagggaga ggccagctct gttagaaaga
47221 gtggtttata cagagaagca tggaaacatt tgctccatgc ctcgccttcc atggatagca
47281 gtccagaaat gctacttgcc tgcctgacag tctttctcca gtccccaggt gtggacacgt
47341 tctgagcacc tgagcctggg tctgccctga cccagattct gtgagctggg acagagaatg
47401 tgtcctgctg tccctcctcc cccacttggg cccacaccct tttctacaca tttggattag
47461 aaatctgaat tggcctttct gtgaaccccca atgacaggca agtccccagt aaagaagcac
47521 ttaatttaat tgctccttca gggtccactt agagtaatag ttgtgaacag ctctccctag
47581 tgtctcccac aggcagtgac aaatgttgct aaagataagt cacaaattct tggcaaggcc
47641 atcttaaata tgggaaggaa accttgttca gtcctgaaca gtcctgttca gactgatctt
47701 atcacaggtt gcacactgcc tcaatgtcac catgtttcta ccctcagttg tgcttggcag
47761 agagaggaca gctatacata aagtctgttc actctacaaa ggtgaaatca tttttttttaa
47821 ggtaattatg attgttctga ggatggtgat tgagtgacat ttaaaaaatg ggaaaagttc
47881 tactcataac tctgtctgct taatttgctt atataaaaga cttaatggtt tttgttgagt
47941 tgatccagag tcagtaacat ttgaatatgt gttattacca tttgatcagt aacaaaacaa
48001 cagggtaagt gggatgccaa atgtggctga gagtttaggg tttacattcc acaccccagc
48061 cttaaatacg tttgtataaa ttattggttg attttttcttt ttcatggctt ttctttgaca
48121 tttgatgggg ctggatttat ggaggcaacc aacaaattac acagcaatga attctggact
48181 gtagtcccac agccttgagc ctagatacta gctgtgtcac taatactctg tgtgaccagg
48241 gtaagttatt tagatacatt tatgactttc caaatcaata ggttggacaa agttatcttc
48301 aaaatgtctt tcagatttga ccctgaacat atgcgattct ggcatgttct gatttttagt
48361 tttctgttct tgaagcatgt ctacaataga aatgcctacc ttcatataca ataaaaggac
48421 attagattaa tatggtgtct gtgaaaatca ttgaacagct ttagagataa aaataatgaa
48481 atgagtcaag ttctccatta ttaattaaat cttttaaatt ttctgtttat gaaactatga
48541 acaataaatt ggaacaaaga tataatctca ctacaagtaa attgtatttt atgtaaaata
48601 taatttgtct ttagaaaata ctcaatgaaa ttacctttttt aatttcagag attttgagga
48661 ctattattgt tatttctttta aagtgataaa tgtaatccaa gatgcctttt ttccccccttc
48721 agaagcttga gtgcccaagg gtttgataaa tgtggaaaat aaccgctgtt cgaatatcct
48781 gttggcctgc tggtgagatg tcatcgtgtt gtctgaatgc agtatgtgtt taaacttgcc
48841 atttattacc tgaaattgtg ttattttgcc tcatacccctt agtaatactc ttgtaatgct
48901 ggctgagaat tgaagcaaat gccctatgaa actcaaggga gcaaggtctt tgttattttt
48961 cagaagaaat gactggctga ggctgtaaag aaatcttgtg gtcattctca tggaaagagg
49021 attggagccc cgattctttg atctcattat tgaccagttg attgagaaga ctgtcctcct
49081 gtccccaccc aatcacaata agtgggtaat tacctgaggg ctaatttgct ccttgaatgt
49141 gaatacattt gtggaaattt ccttgtgctc agcacctgtt caaaacatcc atttgtattg
49201 cagagctatt gtttttctaa tctcattgtg gagctaagag agagattgtg tttaaggttt
49261 ccttcgtaat aggttttctt gctccaggaa ggatgcgtga cagactctgc acactgctgc
49321 ttggtaggtg ttcagtgatg gatgcgtttt ccatctccca ggtacagctg cagctgtgct
49381 gactctggtg cgtttgtaat atgcactgtg gagtgcacca tgatttcatg atggctggag
49441 aaatctggtg gctagaattc tagggaggag gacatgagtc ggaagtgcag aaacctcaca
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FIGURE 4 (cont.'d)

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49501 ctgggacatt gatggagaaa atccaattct gtccctggag ttaaagagga gtcactcact
49561 gggccatcat aagagcaaat aaagttacag ttatttcttc agatccacaa ctcaaactca
49621 gcgaaagtaa ttattcactc tttttgtccc aaacaataat gaaatcagct aaagcatatt
49681 gtatttatta cttccactca agttattgag ctgttctgac accttgttgc tgggaagata
49741 cacagatgga acaccatcat ttccattgat tctgatcata ccccacgcta atatagcctt
49801 attgctctga gtcataggga ttttatgctt gcctattcaa aaaacagttt ttaccttatt
49861 aaaaggtgat atgacctgag ctggagatga tgtttggtca ttttgtgtaa acctttaat
49921 attttagtgg taaatacatt tcttgaatct tgacaaaaac ataattaaaa tgaacatatt
49981 taaaatggac atcttccaaa tgttcatttt taaaacaaac atcttccaaa tgttcatttt
50041 taaaatgaat atcttcgtta actttttttt ttttttttga dacggagtct cgctctgtca
50101 cccaggctgg agtgcagtgg cgcgatctcg gctcactgca agctccgcct cccgggttca
50161 cgccattctc ctgcctcagc ctccagagta gctaggacta caggcgcccg ccaccacgcc
50221 cggctaattt ttgtattttt agtagagacg gggtttcacc gtgttagcca ggaaggtctc
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50341 gagtcaccac gcccagcctc ttccttaact tttaatgaat aaagagttga aagggaaaaa
50401 ccaaatgtgc actatgctga ttttatcttg agctgtacag aatgtgcagt aacttaagaa
50461 tataagtcat tctgctgtta ttcatactag cctattcttt agcattattt aaacacacat
50521 atttgagtgt ctacacactg cctgctaggc aggggctgg gtgccaagaa gggatgtcca
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50641 tgacgtgtat tgtgtactag gatagaagtc agtatcagag gaaacacaaa ggaaagagtg
50701 gtactttctc cccagggaag ggatgctcag aaagaggggg ctgattatgt ccctggttca
50761 tgagaaaaag ggcattcctg gctcagggag tgggaagaac aaaaccaaga aatcctggaa
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50881 tgagtgggaa gaaaggctgg agaggaggtg gatccaggaa aagttgctgg gagcatttat
50941 tcttttggca atgggaagcc atggaagaac tgttgtaagg aggattctgt gtgatacatc
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51061 aaagtgaaaa caatcactgt tcaagctctg gtctagcact caccagtgtt tttcctacag
51121 gtgcatatac aaacatgctt ttacatttta tttttatttt aaatttttca ctatcctcaa
51181 tatcagtgga aacaaatctg ctttttttaat tttttttta aaaatgagat cctattgtac
51241 acattatttt aaattttttt tcattctttc ctttttttaa aattaaaaca attttttttg
51301 agacagtctc actctgtcgc ccaggctaga gtgcagcatc gtggtctcag ctcaccgaaa
51361 ccttgcctcc caggttcaag cgattctcct gcctcagcct tccaagtagc tgggattaca
51421 gacatccacc accaccgtgt caggttaatt tttgtatttt tagtagagaa tggggtttca
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51541 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
51601 nnagcgtatt cgcccgtggt gaagatcgta gtagagtcta ccacctcggc cgtgaacctg
51661 gctcaggggg cgcagccggg gtgggcgacc cagccaggtc tgcggagcgg tgcccggcgg
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51781 ggggccaggc ccgccccagg tagtcaggca ggggtcccgg ctcctccccc aggaccaccg
51841 ccccgcgggc gctcacgtcc tgatggcttc ccacaccagg agcccgtcgt cccggtagaa
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51961 cagggaggca taggtcaggt ccttcatggc cctctgcacc atctgcacgt gcccaccgcc
52021 ccctgtggcg ttggcctgga gtgggaggta gagtgccctg agcgggtggc tcctcccaca
52081 gctgtccaga cccatccctg aggaaatgtg ccaggggagg cgaggaggcc aggcaggcag
52141 aggtgcaagc ccttgtcctg tgagatgggg gagggatgtt taacgcagag aatgacaagg
52201 gcagccgggt ggagaggtgc tagggaggag cctcccgccc aatccaatgc aagggactga
52261 accgtggggc tgcagagtac aagagggaag ggtgcgctcc cagccacagg agggcagcag
52321 gcgtgggcag gtgtgtgggg gaccccagca ccagcgggcc tgggctgtga agtctgctct
52381 agtgctgagc acacgaccct cagtcattgc tctcagtgac cctcagtttc caggacccat
52441 gcaactctgt tgagggcctg ttgtgtgctc aggtgagggc tggagagacc cacaaggagg
52501 gatcctggtc ctgatcccga tcccggcttc tgagtgatgc agacacactc acaagctcac
52561 tggcacatat gtgtgtccac gtgcacacac acacatgcaa atacacccag ggggctgggc
52621 tgtcggtgcc acagaggttt tgaagaagga cttgggtgct ggggtgccag agattggtcc
52681 acggtgggca ttcagcccaa gcaggaccaa ccagagctgc cccccagcac tttctgttta
52741 gatgcggctg ggagataatg gccacatgag aacctgaggt ggagctacta tgatgagctc
```

FIGURE 4 (cont.'d)

```
52801 ctgtgccctc tcccatgggg gcctgtctgc agcaggagag tgtgatgcca acacaggtga
52861 aagagacaga aagagggagc cagtgtgcat gcaccctggg gcattgcttg agtccctgga
52921 tccatttctg gctgaggccc ccgaccctct attgtgtcca ggtatttgag ataaggcatg
52981 tcttgtccag ctgcagctgg tttgagttgg gttttgtcat ttgcagccca aacagtgtct
53041 caacttcagt ggtcatctgg cctggtcact aatgggctgg ggaaaggagg aaggttgggg
53101 caagggccca tgtgagagtc caagcttggt aaggctacag agggctcaaa acgaggtggg
53161 gtgctacctg agggatgcga gggctgggca gggcctggag tccccgatgc aggagacagt
53221 gggttgggag ggttgggacc cgggaagcag agtgctgggg aggtccaggt cagggtggca
53281 ggggtgtggc agattaagag gcagacacag gttcctggtg cgtaggaggt caggggccca
53341 taaggagtgt gttccagagg ggggtctaca cccaggtccc agaggctggg agaggggagg
53401 ggtgggagga ggggaccagg agccatcagt gagaaggaag acctggtggt gcgcctggag
53461 gagtgctcct ggctgaatgg cacgggctgg agacatcagg aggatgctgg agccagtgct
53521 ctgagcagac tccagccttc acccttccag gcctcctgaa agggtgtcta gatctcagat
53581 agggagtgaa ggcggccagg ctgggctctt ccaggcaaca agtagggtag gagggcaccc
53641 accttgtcaa agaggccaca ctcgcagatg agctgctcac gggccttggt gttgattgca
53701 atggtgaatc tcacgtgtgc caccagcagc tggggagggg agaggaggag gcctcagagg
53761 gggcccagtc aggtgacctg gtgcctcagg gacccgcagc tcccccaccc aggcctgccc
53821 tataggatga tgctgggcgc agggaggaag tgaaggctgg gtgctgatct ttctgctgaa
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53941 cctggccagc acttgtacaa tgcttacctc tttgctccct gagttcactg tcttaatctg
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54061 cacatgggta cttttagcat gcagtcaccc cagcagccaa tgcttgtagg attcgagaac
54121 agggacggag agtgatggca ggggcggcca tcagcatcag ccgaggatca ccatgaactc
54181 atttgccttt tccaactcta ctggctggcc agcgaggccc gtgtgtcagg cccatgcccc
54241 agccgcgtgt cctggggaac agcaggctcc tagctgtttt cttcctttag gggcattact
54301 gactctgaga acatctctcc agggctccct ttctgccacc cactcccagc cacaggtccc
54361 cctgtgggat gtcagtgatc cctcccactc cacatctcag atgccctccc atagcaggtg
54421 gggcggtagc tggctgtacc ttgaaaatgg ggtgcacagc aggcagctgg cggtacattg
54481 caatgccaaa aacctcagac accagatgtg ttcgcagaag gtgggtgatg gtctggtgga
54541 cgtggaagtc actggaacgc acccagattt tggccaaaag ccagtcgtat tttgcatccg
54601 aagggaggaa aatagggttc tcatctcccg ggatttggtt gagctgatac attgggggaa
54661 aggaaacaca ctgctatatt tcacttcaga gtatagttgt tggagaactt cgcctcttgg
54721 gaagttccag aagtatctga atttctttaa cagtgacttt ggaatcagaa gagcctggag
54781 ggggtaaagg gccctgcggt ggtatttcct gtcccagcca tattacttac aacctgcatg
54841 actctggatg acacactggg ctttctaagc tccggcttca gcatctgtca tgtggggaca
54901 gtgatcgctc ggctcacagt tactcaggag ctggcagcat ggaaggagcg ggcaggccga
54961 aggcccagca gcggaggggg aggatcgctg tccccctctt ccctccttgc cctgctccct
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55081 ggagctcccc agggtctgcc atggtgctcc tgtcttcttt tcttgcccta agtcagctcc
55141 tcctgtttaa aggcttgggg ccctcctggt actgagcctc ccagatcagg gtctgcagct
55201 tgagctctgc ctggagccca cacctgtggc caggcacctc ctgtagcaga ggctggacct
55261 gtcttccctt tccagtttcc actccacact gggacaaggt gagttttttt cttttccaaa
55321 atgcaaatca tgtcatgtta actgcctcct caatcacctc ttaatgccag aaaataaaat
55381 ccccaagctc tgtggtgacc tggttgctga tgcctctgta cacacagcct cactttcgtg
55441 cccccacacc agcacccagc cccaggtccc tccatgccag cagccctgca cgttgccccc
55501 ttattgagag cccagcacag cctcagcacc cgacagtgag ttctcacggg agccggcagc
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55621 gaatgaggtg ggtgcagggg ctgcagccaa gagcggccag gaaggggcat ggccagactt
55681 taggtgctgg gaaagaccag tgtcactgca gcacagtggt catggctggg gagggagaac
55741 tgtcccagag cacacagctg tgtcacttgc tataagtatt gtggaaggtg gggtccttgg
55801 gcgtctctcc ctcgaaaaca gtgctgtcca atagacatat aatgctaccc cacacatgga
55861 attgtatata ttcaggaagc catattaata aaaataaaag gaaacaggtg aaatgccggt
55921 gaataatata attttatttt acccaatata tccagaatat tatcacttca acatgaaacc
55981 aatctaaaac tattaaatga gatatttcac attccccacc tccttattct aagtcttaaa
56041 aatcaggtgt gaactttgca cttgcagcag gttttggttt ggacgagcca aatcccaagt
```

FIGURE 4 (cont.'d)

```
56101 gctccagagc cctggtggcc agtggctcca ccctggtcag agagacccca gaagcctcag
56161 cactccctga ggaccaagga gggggggaggg aggagggaga gcagagtgtg acttgcacat
56221 taggcgtgcc tgtctgttta tacttgagat tagttggctg cttttaaata ccagacagtt
56281 tcacataaaa atttgaatga cctggttttc ttgaaaaatt agaaggtctc agaactctgc
56341 acccaggttc tcacagaact acgctcttgt ccctttaca gagtcccagc tctcagggtc
56401 cccactgcca cacccgtttg catgagatgc ctgggccact gatacctgat ctgtgcccta
56461 gaatgctggg ctgcctggca tgctctgaga cactttctga catgtcccca catgctctga
56521 catgttcctg atggctctgg gacactgaca tgttcctgat ggctctggga cactgacatg
56581 ttcctgacat cctctggggc cgaggagccc ccctgttgtg tgctaggggc tttacccatg
56641 ctatctcact taatcctcac tttgaccctg caaggcagat attccttgct gtacccattt
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56761 taaagagctc agccggcaac atgatattga acaggcaaaa attggaagca atcccctaa
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56941 aaagaggaag tcaaattatc tttgttcatc catgatatga ttctatacct agaaaaccct
57001 gaagattcct ccaaaagact cctagacttg ataaacaact tcagtaaagt ctcaatgtta
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57301 tctaaactaa aacccgactg gctaataact taaaactttt ctaaataggt aaaagcagtg
57361 gaaagacaaa ggaaaagagg aagttgctta tgaaaggact tagaaaagta ataacatttc
57421 caaataagga aggggcatgg gctgcaagct gggacatgcc tgtgagcacg tccagcacaa
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57541 atatgatagg gcttaacaaa aagttattag cacaaagcga aaaggcttaa aaaaagttag
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58261 ttcctatcaa attatcaaca tcatttttca cagaattaga aaaaaaatc ctaaaattca
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58381 ggcatcacat tacctgactt caaactatac tacaagacta cagtaacaaa aacagcatgg
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59161 atgcttacac actgttggtg gcagtgtaaa ttacttccat ccctgtggaa agcagtttgg
59221 agattttgca aagaactgca aatagaatta ccagttgacc caacaacccc attactgtgt
59281 acctacccaa aggaaaagaa attgtttttac caaaaggaca taggcacaca tatgtttatt
59341 gcagcactgt tcacaatatc aaaatcatgt aatcaaccta ggtgcccatc aatagtggca
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FIGURE 4 (cont.'d)

```
59401 ccagataaag aaaatgtgat acatgtactc caaggaatac tacatagcca taaaaaagaa
59461 tgaaatcgtg ttctttgcag caacatggat gcagcttagg attggcactt aagccataat
59521 cttaagtgaa ttaacccaga aacagaaaat cgaatactgc atgttcttat ttataagtgg
59581 gagctaagca ttgtgtacac atgggcataa aagtgggaac aaaagacact ggggactcca
59641 ggaaggggag ggagggagga aagggttgaa aaactgggta ttgggtacta tgctcagtat
59701 ttgagtgatg ggttcaatag aagcctaacc ccagcattat gcaatataac catgtaacaa
59761 acctgcacat gtacctgaat ctaaaatttt atatattaaa aaaaaaaaaa ctgttctgac
59821 cagtaaaaaa agagctgaat gaggatgggc ccagtgctct gcctatttca gcccatcact
59881 ctcccttctg cttctcttca cctcccggcc tgaccgggcc tcacctgccc atctccttga
59941 gctcttgtac cactgagctg ggccttcccc aacccatcct tcacatcctc ccactcctgt
60001 ccaggattt ggcctgccat gggatgccag aacttgccct gagcaatttg tgtttcttaa
60061 atttgttttt tgggtaagga agtagctttg cgtttctgat tagaaaagaa tatgtgctta
60121 tcgtaaaaag aaatctgagt catgacagga gagcctgaga aagaaaacat catctcatct
60181 tccagcgccc agggataacc accaaattct ggggagcctc ctttcatagg tctttgcatg
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60301 tctttgtttt gctcacctgt cccccactgg gccatcactg tgttcctacc tggtgacact
60361 gcgtccttgt gtccccatgc tggcacagta ggcctgctgc atccttgcat tcattttaca
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60481 tgtatccttt atcggtccct tgtgtcttgt ttttccactg ttaactcatt gtggagaccc
60541 ctccaggtca gctggaaggg aaccaaagca ttcctttcaa agacgcctca acattttatg
60601 gtgaggacat ggaagggctc actcactcaa tcctcttctg ccttcagact gttttcaatt
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60841 tactggctgt cagaacactt aaacaataaa gtcccctcca gtgctcctcc aattgagacg
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60961 gaaggaaaat cccgagttcc ttgaagggaa gttccaggca cctagctagc cctgagaaat
61021 aaatgagcaa cttgacaaac aagagggtaa cagcagccta aaacaacagc caaggaagcc
61081 agagtcctgg gctgtttggt tccctctgga aactaaagag aacccctgaa catgtgtctc
61141 tgagttgttt ttcagaaacc cagaccccca ccaaaccgat ccactggcac agagacctca
61201 gataagacgg aactgaggac tgaactctga gcaggctctt tgttctaaat ttcttcctgg
61261 ggggcctggg ggaagtcccg cccacaagcc acagctaaca ttcctttctg gtaacccaaa
61321 ttttaaatg aaacttctct tccttaacca atttcaaaac aacaaatttt tgaatctacc
61381 tatgacctgg aagcccaccc ccacttcaag atatcccgcc cttttaggcc aaaaccaatg
61441 tgtaccctcc atgtattgat taatgatttt gcctgttaac ttctgcaatt cctgaaattc
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61561 ctgcccaatt ctccttttt ggtccccgca ataaatgcct tgtgttctcg tagattatat
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61861 acactgccag gctgcaacaa ctcatgagca gagcatgggg ctccgtcctt gctggtgtct
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62041 atttacattt cttctttgt gaattgccta ttcatattct ctgctcattt ttccactgga
62101 gtattggtat tttcccgtca atgtaaagga ctacctgtg tatcatagat aggcatctct
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62221 tatggtttat cactcaagtt ttaaacatt acataatcaa atatgcttag ctttccctt
62281 ataacttctt ggtttccttt tccttctaaa agtcttctga gtgtctgcgt aattagtttt
62341 tctaaattcg tttacttttt tcattttaat ttttacttca tctgaatttt ttcttttct
62401 tctaagcaac tcctctacat gatgagattt atttttgtaa atggcatgac agagcagtcc
62461 aatttaattt tcttctcatg caaaggcagt gtgatagcat cattaaaata atatcccttt
62521 ttcactgagt tgaaaaacct ccattgtgat acactgaatt cctctgtggg ggagtccatt
62581 tctggatctt actctatact gtcccccaat tctctctgtt ttcaagcaca gtgtctgctt
62641 aacagtaacc ttacaaatcc agcaaggaaa gtgttccttc tgtgtttct tttacttttt
```

FIGURE 4 (cont.'d)

```
62701 tttttttttt taaagatagg gtcttactct gttgcccagt gtggagtgca gtggagcgac
62761 catggctcac tgcagcctca aactcctgga ctcaagccat cctcccacct cagcctcctg
62821 agcagttggg attacaggca tgcgccacca tacctaattt tttctattaa ttttttttt
62881 ttttaagaca tgaggtctca cttggttgcc ctgcctctct atgtggtttt aatttttttc
62941 aaaaaatttt tgactatgct agatttcttt ttccatatga atctttcaat ttttttaattg
63001 ttttctctcc ttttagttc ctcttcacca ccaccacacc cccaccaaga aagataaaaa
63061 attctggctg aaatttact tggaagtgca ttaagttttt ataatagaat ttggtagaac
63121 tgacattttt acagtttcct ccccaatatc aaatcactgt taagagttca ttgtatatcc
63181 tttaaaataa ctttatagtt ggccgggtgc ggtagctcac gcctgtaatg ccaacacttt
63241 gggaggctga ggcaggcaaa tcacaaggtc aggagttcga gaccagcctg gccaacatgg
63301 tgaaatgccg tctctactaa aaatacaaaa aattagctgg gcgtggtggc aggtgcctgt
63361 aatcccagct actcgggagg ctgaggcagg agaattgctt gaacctggga ggtggaggtt
63421 gcagtgagcc gagatcacgc cactgcactc tagcctgggt gacagtgcga aactccatct
63481 caaataaata aataaataaa taaataaata aataaataaa taactttata gttttttcctt
63541 atatgggcat tatattttat tgttagtatg gagaaaggct attgatttt ttgagaaata
63601 tatttatcta aacactttgc caaatgaatt tattaatcta gtagctttta aaaaaattag
63661 aatctcttgt gtttctagg tctaccatag cattaccaga aaagatcatc ttccctgttc
63721 tttgacaata tgtttattga ttgttttcct gttttatcat gtggtatgac ctctaaaata
63781 atgttgaata aaaacagtga tatcagcatt cttattattt taatggaaat ggcattagag
63841 ttgcaccttt ttgatgttag ctatctttat catataaagt aaggttcctc ctattaattt
63901 ttattagttg tggctattaa atgttattaa attccctttt agtgtgaatt gatataatca
63961 taaactttat ccttatgggt ataataaatt atggtggtag ctctcttgat attgaaatat
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64081 cgctaatatc acctttagtt ttcttttaaa tctttattta atacttggat tggtcttcag
64141 ccttctttg aagcctgcct gtatccagtt tcagaactaa gcttacacca gctttatatg
64201 atcaatttgg ggctgataaa gagccctgga aatgtcagct gtctagtggc tgggtgagac
64261 tcagctgctc gctgtgtagg tctgtttcca atcactatat ggaaattggc ctattttcta
64321 caatttcttc taatttatct tttcctaggt ttttatccat ttctctaatt tttcaaattt
64381 ttgccatatt actctcattt aaaaaaatatg taatcataat tactgttctt tttttttttt
64441 aagagacggg gtcttgatat gttgctcagg ctagactgct gtggctattc acaggtgtga
64501 tcatagcaca ctacagcctc aagtgagcct cctgcctcag cctctcaagt agctgggact
64561 acagttgtgt accaccatgg tgcctggcta taattactct ttttatgatt cctttttat
64621 tccgaatctt gcattttttt tttctatctc ttttttttcca tcagcctcat gaggaggtta
64681 ttattattat tttttggacc tttcaaagaa ccagatcttg gatttactat cctctggctt
64741 tcatttgctt gagtctttat agtttgcaaa gtttccattt tcagaagaag aaagagaccc
64801 aggaacattc tgtggcttgc tcaaggtccc acagcctgct agcaagtggc tgaactggaa
64861 tttaagctag gcccctgact ccaggctgct ccaagagatc tctgagccaa gcttttgaag
64921 gcaccatcag tggtgcctgg gatctccggg gatctcccag caattttgtc ttcttttagg
64981 tcacctgtcc ctttacctgc tgcttcagtt cttaggcac agggcttctc tctggtaaca
65041 gacaggaagc tcctctgagg ctacgtgccc ctgggagact gtggggaggc tggaatctag
65101 agtcagatga cctggcttga atcctagctc tgtggctggc tgtgggcacc tgtgtctcag
65161 ttttcttatc tgggtaaaat gatcaacatc aatagagccc actacctagg atggttgtgg
65221 tgatgattac acaaataaag ataggttatc taaaacccca gtggtcaaat gtgcttcaga
65281 atccagaatt tttaggattt tagcagtggg tatacttcat tatgtgccat acccctccc
65341 accccagtc tagggcaaca tactatttta caatcgaaca gagcagtatt tctgcagtga
65401 tccacataca tatcacattg aatggaaaaa gcctctaaat aacctcacct attgcttcaa
65461 agaaggtttg tttacaaaca atgaatttgc tgcacagttt tgaaatatgc agcagttttc
65521 agattttta gatttagaat cgagggtaag ggattgcgga ctgtgcaggt taacccatag
65581 gatagccttg gcatgtggct ggtgcctgac ctatccagct gctattgtgt ccacagctcc
65641 caaggtccag ttcatggaca ttatttgctg aatgctcatc tgccagtctc ccacggtgtc
65701 ctctcgcag ttcctcccta ctcccaggga cctatgccca gtccagtcct ggccttggcc
65761 cctgctgtct gcacaccagc tcccagcctg gcagcaggct ggtgccagga acaggggag
65821 acaaagccct gtgcccgcct gcctttcctc cagggtctcc ctcttcctcc tgcctcatct
65881 ccggtggaca taagaactca catcatcatc aaaggtggca taccaggact ggcctggttc
65941 ctgaccccag aacccatggt gcccctcagt ggtcttggtc tccagcttag tccacagctt
```

FIGURE 4 (cont.'d)

```
66001 cacctgcctg gccctggca gcaccttgac tgggggccct tggtcagggt gctggggtgg
66061 agagtgcaga atatgatccc agggcaggtc ctccacagtg tgcctcgact ggccaggggc
66121 ttctcaagtg tgccttgggg agtagaaccc tctccgcccc tatggacagc ccacctcagg
66181 gcctgcagga agccctagtg tctttcaaga catagcttcc tcagctggag tgtgaatgga
66241 gccacccagg agccctggat cgcagaggac tgagctgctc agaaaggtgt gcccccagc
66301 agcctacctg gatggcaatg gggacaatct tgttggccag gttcttatac agcaagcaga
66361 tgggagcggc caggaactgg agtgtgcagg ggtctgtttt gttggcatcg atgccatcca
66421 gcagctcaaa gtccacgatg aaaatgttcc cttgctgcag gaggcagaga gatgtgtcca
66481 aatcaggctc agcagacgga ccaaaaatca ggcctgggga aagagtgatg acctctgggc
66541 acccctctcc ctttcctgcg actcagcgga gctcagaatg tgtacttctc tcctctgact
66601 ccaaggctga ttgattcaca tggaaggtgt tcacaggttg tggcagttcg gggtaagatg
66661 aaggaatggc agcagctcat tcggcatttg tggtgtctga aacctgcttg actggcacga
66721 aagatgagag accgacccga gtgtcagttt actaagaaga aagaggttag gtgaaataga
66781 tgtgacgagt taaatgccaa tcttcaccac ggggctgaag gtccgnnnnn nnnnnnnnnn
66841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
66901 nnnnnnnnnn nnnnnnnnnn nnnnggggt cctcagggac tgggcctcag cccgccggtg
66961 gttccaccct aggcttcccc aagtcggtca agagccggga gcagctgtcg gagtacctga
67021 ccgtggtgat cttcaccgcc tccgcccagc acgccgcggt caacttcggc caggtaggca
67081 gggccgggcc cgctgggcag ggctcccttc tcaaggccgc tgcctcctcc cccgcccggg
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67201 gattctgccc gctcagccaa gggcgctggc cgcggggaaa gaggatggac ggactgcagg
67261 gcccgctgga gttgggggc acggggagga cggggcccag ggggcagctg ggcagcaggg
67321 cttcgggggt gcccacgctt gctggccggtc gtctccgcag tacgactggt gctcctggat
67381 ccccaatgcg cccccaacca tgcgagcccc gccaccgact gccaagggcg tggtgaccat
67441 tgagcagatc gtggacacgc tgcccgaccg cggccgctcc tgctggcatc tgggtgcagt
67501 gtgggcgctg agccagttcc aggaaaacga ggtgaagctg ggcagggcgg ggcacagccc
67561 caggtcaccc caggttaagc ggttcctcag cctcagggct ttgtgactcg ggccccaagg
67621 ctcacttgga gcaaaggaat cctgacttcc aaggctggaa gggcccagaa ggctgcagcc
67681 gccaccaggt ccccggcct cagcctggac agagctcagg gtgtgcaggg caggagagca
67741 cacagcccag gctttgctca ctgtcaccag agggtcgtgt gtgacgcccc ctcccccag
67801 ctattgacaa agttcttgca catgtgtttt accctggtac tccagaggga atgaccaaga
67861 gtttcctggg ttccttccgg acacgtgcat ctcatttaac ctaacaactg aatccggtgt
67921 gtcttcgtgg atgcacccgc tttggggtag ctcagtactg catagaatgg ccggaccagt
67981 ccaacctgct ccagactgct gggtgtctga gttgttcccg gccaatgtgt tggtccctca
68041 ctggacatcc ttgttttgt ggctttgcac atgtgttcag tatgaccgca cacattccta
68101 gcagacaaat tccttggtca aagaatattg atactgaatt gccctccaca aactaaattc
68161 aaaatcccat tatcaatagc ctatgtttct tggaccttc cagctcagaa gctttgtgat
68221 cttaatccaa tacagtattt ttttaaaatg atatctagct ctgccccgca gacatctgtg
68281 tgagaatgca aataagcaca ggaccccaac agggcagcca ccccttcagg ctccctggcc
68341 cgctttctgc cttcctgggc tggagaggcc agtgctggcc ccagcgcccc tgatgggagg
68401 tgagagtgct gcgcaggggt ggcccaagac agcaggatac catggctgca aacaccagca
68461 gcccccagct tcatctgcat catctcgtaa ccacttggca gcaggcagtt attttcccac
68521 ttatccatga agccccagcc ctggagcctt ccttagagaa gcaggttgga ggcgacgaca
68581 cttgccttcc cgaggccctc ttgtcaggca gcagagggtg aatatgggga ggtgaataga
68641 tgctccctcc ttcatctccc aaacggtggc tggccccttg ggatgagaca ggcctgtcag
68701 tttacacggg tagtggattg acctatgtgt gtgtccatgt ctgggccctc agctgttcct
68761 gggcatgtac ccagaagagc attttatcga gaagcctgtg aaggaagcca tggcccgatt
68821 ccgcaagaac ctcgaggcca ttgtcagcgt gattgctgag cgcaacaaga agaagcagct
68881 gccatattac tacttgtccc cagaccggat tccgaacagt gtggccatct gagcacactg
68941 ccagtctcac tgtgggaagg ccagctgccc cagccagatg gactccagcc tgcctggcag
69001 gctgtctggc caggcctctt ggcagtcaca tctcttcctc cgaggccagt acctttccat
69061 ttattctttg atcttcaggg aactgcatag attgatcaaa gtgtaaacac cataggggacc
69121 cattctacac agagcaggac tgcacagcgt cctgtccaca cccagctcag catttccaca
69181 ccaagcagca acagcaaatc acgaccactg atagatgtct attcttgttg gagacatggg
69241 atgattattt tctgttctat ttgtgcttag tccaattcct tgcacatagt aggtacccaa
```

FIGURE 4 (cont.'d)

```
69301 ttcaattact attgaatgaa ttaagaattg gttgccataa aaataaatca gttcatttaa
69361 aatgggtctt gttccatgtg ttatattcca atcaccccaa acagctcact gccatctccc
69421 acaccaagag aaaaaaaaag ccatagtcac cgtgatttta tcaaggcaaa agcctcccca
69481 cccaagtctg gatagaaggt gcttttccc tcaagcagtg tctactctct ttggaacaca
69541 tcccaaatgt caccacctct gggaaggcat ccttggttcc tgtctctacc ctggatttgt
69601 cagaacctct gttcttgccc cctctgtggt ctctcccttg ggacaggagc ccctggaagg
69661 acagaaaacc cactttattt atgtctgtgc cccagggctg gcataaggca ccagcactca
69721 gctgttctct ccttttcctc ctggaagggc acctagctaa tggatattag gcattgtctt
69781 gggagctggg ggcttatttt ttcctgaggc agggttctta acatgacata aaaaataaaa
69841 atgggcaggg cgcggtggct cacgcctgta atcccagcat tttgggaggc caaggtggga
69901 ggatcatttg aggtcagaat tcaagaccag cctggccaac acggtgaaac cccatctcta
69961 ctgaaaatac aaaaattagc caggcatggt agcaggtacc tgtaatccca gctactcagg
70021 aggctgaggc aggaaaattg catgaacctg ggagacagag gttgcagaga gtggatatcg
70081 caccactgca ctccagcctg ggcaatagag cgagactctg tctcaaatag ttaataaata
70141 aataaattaa attaaataaa aacgcattct ctttccccag ccccaagtag cagagcccgc
70201 tctgagcctg ggcatggtga cccattctcc tcgtgctcac atgcccaact cccagccctc
70261 cagcccctgg cttcggaatc atgtcatcag ggtctcccat gtctctggaa ggtgcttcca
70321 gtgtggcagg ccatcagctc agtgtctggg taaaggcttc tacagggcca gcatggcata
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70561 atggtagagg cattcagctc catgccactg tgagaatgaa cataccaact tttaggcaac
70621 aaggccatgt ggtcaaggag agaggagaaa cgaataggag taggcagggg tggtgaagca
70681 ggtctgacat tggcaaaagt gacagagaag gattgggttg gaagggcttc agatggcaga
70741 gaacctctga aaaagtctca tgccagctaa tgaagagtcc tcaaagtcac catcacagaa
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70861 cgtgtggcag ctgagatcgt cagttaatta tgttctctgc agctggtcct tctggttccc
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70981 attctgtgca tagactgtct aaacctctgg atgaccccta agacacatgt acataaggca
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71161 aggctggaag tctaagagga ggcactggca gtttcagtgt ctggtaaggg agggatcagt
71221 gtctgctccc aagaggatgc cctctgtgct gtgtcctcac ccagcagaag agcaaaaaag
71281 ggcgaacatt ctcaaaagcc tcttttataa ggacatcaat ccattcatga gggcagaacc
71341 ctcaagaatt aatcatttct caaaaggccc ctcctcctaa tgccatcacc ttggggttta
71401 agttccaaca catgattttt ggaaggacac atacattcaa atcattgcac aaccaaagtg
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71581 aaggtgggca gatcacttga ggtcaggagt tcgaaaccag cctgaccaac atggtgaaac
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72241 aattgtagat tctagggttt atatatattc tcactatata attaaacgtt tttatgttta
72301 aaaattttta taatgttgaa aaaccatgaa atcctaccta acgcagtaag acaagaaaaa
72361 gagataaaag gtatatgtac tgggaagtaa gaaataaaac cgtctttgtt agcagatgac
72421 atgctcatct atgtagaaaa tccaaaagaa tggataaaga aactcctgga actaataagt
72481 ggttacagta aggttgtagg atacaaggtt aatatacaaa agtcaatcac tctcttattc
72541 accagtaatg aacaagtgga aattgaaatt caaaacaaaa tactatttac attaatactc
```

FIGURE 4 (cont.'d)

```
72601 caaaaataca tacttaggtt taaatctaat aaaatacata caagatcttt atgaggaaaa
72661 ctgcaaccct gatgacagaa atcaaagaga aactaaagaa atagacataa gtaaatattc
72721 cccagaaaga ctcaatattg tcaagatgtc agttcttcaa aacttgacct atagattcaa
72781 tgcaatccta atcaaaatct cagcaagtta tgttgtggat actgacaaac ttattctttt
72841 tttttttttt tttttttttg agacggagtt tcgctctgtt gcccaggctg gagtgcagtg
72901 gcgcgatctc gactcactgc aagctccgcc tcccgggttc acgccattct cctgcctcag
72961 cctcccatgt agctgggact acaggcacgc gccaccatgc ccggctaatt tttgtatttt
73021 tagtagagac ggggtttcac cgtgttagcc aggatggtct cgatctcctg acctcgtgat
73081 ccaccgtct cggcctccca aagtgctggg attacaggcg tgagccaccg cgccggcca
73141 acttattcta aaatttagat agggaagcaa aagacccaga acagctaaca caacaatata
73201 gtaggaaaac aacaaatttg gaaaatggat actacccaac tccaagactt actataaagc
73261 tacagtaatc aagatagtgc cgtattggtg aaagaataga caaatagatc aatggaacag
73321 aatagagagc ctaagaaata gaccttcata aatacagtca actcatcctt gacaaagtag
73381 catagacact acaatggagc aaagattgtc ttttcaacaa gtggtgcagg aacaactgga
73441 tatccacatg caaaaacaaa caaacaagca tgaatctaga tacagacctt atgctcttca
73501 caaaaattaa ctcaaaatgg attatagatc taaatgtaaa attcaaaact ataaaattcc
73561 cataacatag gataaaatct agatgaccta ggtatggcta tgacttttta gacataacac
73621 caaagccatg gtccatgaaa gaaataattg gtaagttgga cttaattaaa attaaaacct
73681 tccgctctgc aaaagaccac actaggagag ggaggaaata tttacaaaga cacatctgat
73741 aaagaattgt tacttaaatt atacaaagcc ttcttaaact taacagtaag gaaacaatct
73801 gattgaaaaa tgggccaaag actttaacaa acaaagaag atatacaaat ggcaagtaag
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73921 tttgggaggt caaggcgggc agatcacctg aggtcaagag accagcctgt ccaacatgga
73981 aaaacctgtc tctactaaaa atataaaatt agctaggcat ggtgatgcat gcctgtcatc
74041 ccagctactt gggaagctga ggcaggagaa tcgcttgaac ccggaaggtg gaggttgcag
74101 tgagccaaga tcgcgccatt gcactccagc ctgggcaaca agagtaaaac tctgtctcaa
74161 gaaaaaaaaa aaaaagctgc acattctatg ttatcaggga aatgcaaatt tagaataacg
74221 caataacaag ataccactac atacatatta gaatggccaa aattgagaac actgacagca
74281 ccaaatgtgg aggaggatgt ggagcaacag gaactagaga gaatgcaaaa tggtatagcc
74341 acttaggaag acagcttggc agtttcttac aaaactaaat atactcttac cacacaatcc
74401 agcaatcaca ctccttggta tttacttaca tcccaacaaa aaccctcata tggatgtcta
74461 gagcagcttt gttcataatt gtcaaaactt ggaagcaacc aaagatgccc ttcggtaggt
74521 gagtaaataa ataatatcca gacaatggaa ataccattca gtactaaaga gaaatgagct
74581 atcaagccat gaaaaggcgt ggaagaaact gaagtgtgta tcactaaaag tcaatctgaa
74641 aagggtgcat aagtttccaa agatatgata ttgcagaaaa ggcaaaactg tggagacagt
74701 aaaaagattg ccagggggcta gggcagtggg agggatgaat aggcagggca cagaggattt
74761 tcagggcaat aacactactc tgtatgacac tataatgttg gatacatggc cagatccaca
74821 gaatgtagaa caccaagagt gaaccttgaa ctatggactt tgagtgatga ggatgagtca
74881 gtgtaggctc atggattgta ataaatgcac cactgtgggg ggggggggat attgataact
74941 ggggggctgt acatgtgtag ggacaggagt aaatgggaaa tctctacttt tgttaccggt
75001 ggagggtgta ccgcattttg aacaaaaaat tggacaaaac gcacaaagca aggaaagaat
75061 gaagcaacaa aagcagagat ttattgaaaa cgaaagtaca ctccacaggg tgggagcagg
75121 cctaagcagg tggctcaagg gcctgaatac agatttttct ggggtttaaa taccctctag
75181 aggtttccat tggttacttg gtgtataccc tacgcaaatg aagaggatga agggaggtta
75241 caaagttatt tacttggtgt agaaaattag ggttttttccc ttttatttag ttgtaggaag
75301 cccttaggtt acctgcctcc agaccctatt ctcctgcctc attttattcc taatttgttt
75361 gtgaacctaa aattgctcta aaaatgaaa tcttttaaac aagaaataa acttataaat
75421 tgcaaatatg tgtcacttac ataaaaacaa agaattagtg tccctacatc aggaaaaaaa
75481 cacctataat tcaatgtaaa aatgcaaaaa agccaagaga aatggccaag ccatggaaat
75541 tcacagaagt agaaataggc agtaaataaa caatgctcaa tttcatttat ctgagaaatg
75601 gagagtaaaa cttcagtgac atacaaagga gtaacaatca ttttaggaac aattttaaaa
75661 ataacacttg tgatgtggct caggaaagat tcatattctc actgtaggaa ggtaagtgaa
75721 tcattttaga ggtcagtttt gcaacttaga agatcaaatg catctaccct ttttctactt
75781 ctagaaatgt atcttcagaa gtgcccctcc ctccctcaca cacccccaag tgtacaaaaa
75841 taaatgacat ggatgtggac tgcagccttg tttctaatac caaaaatcag taaacaacct
```

FIGURE 4 (cont.'d)

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75901 aaaaatctgt atccatgagg atttaaagaa atcctgcatg agttagaaag aataaggtag
75961 atgcctgggt tctaacatag aaaatatcaa actggttgtt agatgaaaaa agcaagttgc
76021 aaagtgaggt aatgtgtaaa tgcagtaagc aaaatacatc atatatatag tactttctat
76081 gtatttacct atatgagcgt gatgcctcca actgcatagc tgtggctccg ggagcaggac
76141 cttgtaacag agcctctgcc cctgactgtc ctgaggggcc tttccctggg aaaggaacca
76201 ggtttgattt tcagtctctt ttgttatcac catgctgaca gctttgcttg tcatatgcct
76261 ttccctccgc tgtactgatt ttaccttaca gaagctctcc ttagtgcttc atcagacact
76321 ccctcttttc caaagaaaag acagccgcat tccatggtca tctggttgag ctcgaggtga
76381 gccccaggga tcatgtgcct cccaccaggc tgacacccca gtggtgagga gttgcccctt
76441 ggcttttcg aggccaagca actcagaggt gtggcaggat tgcatgtcac agtggcactt
76501 ccaaggccct ggagagtgac tcaacgcctc tgttattaag atgtcacaca ggctgtgcag
76561 caacaactct agggacaccc ttcacactga cagagttggc aagctttttcc tataaagggg
76621 cacacagtga atactgtagg ctttgtaggc catactatct gtcccaacaa ttcaactttg
76681 cccactgtag ctgtgaatca accgtagata atattaagtg aatgtgcact gctgtttgct
76741 aatagtttat tgacaaaaac agctgctttt gagcagtttg ctacccgac agagactgtg
76801 gggagtccct ggtggcagcg agctacaggc agccagtacc ccatcagtgt ggctggttcc
76861 atcctctcaa gcctgcctgc acccagacac tgtcgagtgt gtcttcagaa aaactcctaa
76921 aattccccaa aagcacagtg gctccccgag agccacctcc ctcaccttct tacaggggca
76981 ggttcctctt ccggttccac cctcctcagc acggagctca ggggccatcc ccacctcctc
77041 ttggccgcaa gcacagacct tcccacacag gctcagcagc tctgcgggcc tgtcccccac
77101 ctggagctgc aggcctccac tcctggggac agctgtgacc atggctctgc aaagcagcct
77161 tgtgcctagc tcccaagtca gctggcagcc cagagtggaa caattctgtg gatcacctct
77221 gagacagcag cacatctggg caagcctggc ttcccacccc tcacctcctg caacctctga
77281 cccttgccat gcatgtggta gggaagctgc aaccaggcct cagcactccc agacctgtgg
77341 gcggtttgct gtctgaggat cgtggcactg ccttccctca gaggccttgc cagagccagg
77401 ggatgcagcg tggcagagct gtcactggca accctgctgg tctccctggt gctttctcag
77461 ctgggctgtg ggtcaggaca aatttctatg gataaggctg gatcataatc tagtgctcca
77521 tggtcatgca gcgacagact cgagtctgcc ttctctcagg gtggtgagct caggtaggaa
77581 cgggatgttt gaagcaagca cacctgtgag aaatgcctgt tttcactccc atcccacaca
77641 ctcgtccaga cactgccagc ccacccccga cacacgtgtc tgaggaggc tgaggaaaac
77701 agacacctcc aggagccgca tactcatttcc tgatgtgtaa gccagacaac cctggaaagg
77761 aggtcaggga accggagtgc ctgccaacgt ccccagcctc cctgcagcaa aacactctca
77821 tggcaaaact ccttttttaaa gaaaggcttt attgctgcaa ttagacatcc cagtgtatag
77881 cacaaacccc cctgtacaga gaattattca agtggtaata ctgagaaaca gtgaacacac
77941 acaaaagaat acaaaactag acatttagat cactagaaac tttctaaggt aagaaaaatt
78001 tcaaatgtga agtgcctttt agaaactaca ccacacatgc cagtgtaaat ttggtttaac
78061 aatcaatttc tataaacatt gcatctaact gtgcactgat caactgcaca acttcaacaa
78121 ttacttccaa gacaaagata aatgctttta tttccctatg ttttggtctt tccttgggct
78181 agagacagaa gctgcatgtt tcaaaccaga ttcaaaaggg aaagcacttc aaaacagaaa
78241 gtacttcaat tgtgtatttg ccttcagcca catccagaga cttgtggatc tcacccggtt
78301 ggtcccagcc cttctccaac cctgaagccc acagcagggg tgcagaggca gccccagatc
78361 gtgcagacat cacccgaggc tcccaaactg gcccagctgc ctgaggcctg catgcctgtg
78421 gccaggtagg acacatgtgc aggtttgaaa actaggccta caagactgaa gagtggactg
78481 aagcaaaaag gggagaaaca ttagaggcct acagtaggaa gagacctttt atagagtttt
78541 caggaaattc tcacaataaa cttgggcaca aagaccaaat tgctgaggcc agaagcctgc
78601 ttatggtact gtgacttatg gggagtagag gccaaatcag agagggctgg ctggtgatac
78661 cccagaccac ttgcctcttc cccttccctg gcctacaaat accaggcctc ctggccctga
78721 gacctcattc tgggtttcta tatgggtcaa ccaaatgcca tcctttcact aaacccaggt
78781 gcaaatgggg gggggaaggg gggaagctgg ggagtacaca gcacccaaaa gaaccgagag
78841 agcaagtttt ccaaggctac aggaacattg gcagagctgg tggccacacc agatgggagt
78901 accacatccc caccaggctt catgcttcac tgctagatgc aggggggctag aagggtctga
78961 tgaatcagga gctgaactag aaccttcaag aaaagaaaag gcaagggggt ggctctgtgc
79021 cccgccagga gaggaaagaa gaatgtgtgt ggattgtcca cagtgaggcc agaaacgatg
79081 agatggtgtt aggcagaaaa gaagggagag ggcttcccat gagaatctgg ctgggcatgg
79141 gagggataca gggctcagtt atcaaggcac ctttgccata gtggggtgcc agctacattg
```

FIGURE 4 (cont.'d)

```
79201 ggtgggatgc ccaggggctg tccctaccta agcactttct tgtctacagg aagtcttggt
79261 gctttttcaag ttcagcataa ggggttccat atgtgaagtg gggattcaca cttagaaaat
79321 ctatcctggt cttcacctga aacactcatc tactgctggg tggcaggaac aagtatacaa
79381 aaccaggggc cttgcctggg cagttcctaa gggacattgg cagggctgac ctgggattca
79441 gctccctga gtggacagtc tgtggttgcc tggggtcccc aggctgagaa ggggtatggg
79501 taattgcact tcggggcaca gtgaacacag gcacgggctg gatgtgccct gggagacaga
79561 aaggagaggc tgacctattc tcaggagctg gctatggctg gacagtgcct gcccggccag
79621 aggaaggcca cagcagagcc actccacaga ctaagacctg tgttgccaag gaatcagaca
79681 ctggcttgga ggagacagga ggacaaagcc tgctgctatt aagcccacac cgtagcttag
79741 agatccttca gcctcctggc cttcaaaaca aactccaggg cttccactct gaaaggcaaa
79801 ggaatcacct cgtgtttgct tcatccccttt agcaggatga acgaaacgcc taaggcccaa
79861 aaagactgag ggcaggaccc ccagcatctc ccatctcctc cgtgcaggct gggtgagaga
79921 atggcctgga aaggaagcat ctgcgctaca ttgtgcttca ggcccccccca gcaactttcc
79981 cggaggtaac tatttgcctg gaaaactagg aaactgggtt ttaaaaacag aattttaagc
80041 agactttttta gagggacaag gccatttgat ggtagtgatt ttggttttgt tttatgaaaa
80101 tggtacaggt ggtaatccct gatgacagaa tgcactgaga gtggggccaa gggccctgaa
80161 ggatcctgtc tgttcagtct ggttaaggcg acagctgggc gggcatgtgg ccggggagca
80221 gtggcacagc ggaccctggc agtttgctca cacctggccc tcgtcccaga gccagcccac
80281 ctgcctcttg gccctggtag tgactccaca gaacttcccc gagcagaagc ctcacagtgg
80341 gccagcaccc atcttgcatg caagggagaa cctgcatgca gtgcacacac cccggccagg
80401 gtggcacatg gctgctcttt caatgtgaag ccaacaccaa ctggagagat ttaactataa
80461 aggaatattt tttaaatatt cagttttgtt gtcattactc acttccttttc cttccatttc
80521 gatctcagaa actgttcttt ttcagtgttg acaaaaaaga aatgtatggg ccaggtctac
80581 aaagtaacac cttgtcataa aacaggctca aaagcatagg aatcatgctt taattgccat
80641 ttagcatcca ctaattccca tgagatctgt gattaaaaaa aaagcctctg gcctgcttgt
80701 cctgtcttaa aagtcatgag tctgttttat gaacagaaag aatgccacgc ttcttagcat
80761 atgtaaggca aaatggatttt ttgatctctc atgatgtaaa ggagatacaa aggtaaggaa
80821 gggaagatttt ctaagtgaga cttttttttga gtgtcaatcc cgctggacac acatattaca
80881 aaataaagat tttcttctgt aaagtgctgt ttgctcagtg aatcatgcgc caccacagag
80941 caccatggct ccacctgctc aagagcatgg aggaggcagc atcggcagag ggcaggcagg
81001 agtctgtgtt tggggggtctg tttcaatacc atctcctggg gttcgccgtg atgcagaggg
81061 aatcttctcg tcatggctag acactcccca atgctctgct ccaggctggg gaccactgca
81121 agctggaggc ggctgggtat cagggcctgg gcacccctgc tcctcctctt cccttgggat
81181 tggcatttta ttctctcatt cagctcaaga ccatgggcag gaactctgct ggctccccat
81241 gatgtcatca tggggtcttc cactttccca cagagctgcc aggcagaggc aggacccagg
81301 catgcctggc ccacaggaag gttttctagg agactaagga gggtttagaa aaagagaagc
81361 cactataaat agtcacctgt ccagtctatg ctattaaagg acataagaaa ggtatacaat
81421 tggcagtaaa caatttcctt cagctcttca tggatgtcca ggaaaatgac aacccgcaca
81481 caatcagacg tgaatgattt ctgctccagt gtcttcaggc tctgtgcaac aagaagagtt
81541 tgtgtcggaa tgacagattc catatccatg tttattttca aagttgggct ctgttagtgg
81601 agattttttca aaaatattct ttttgcttgt ttctggacag ttttgaacat agatcactct
81661 attataggcc ttgagtctct tccacaattg cacatacact ttacactgaa catacataaa
81721 aagaagtcct ccggtgaagc cgatggccac aaccaccaat ttagtccaaa agggccattc
81781 taggattcct ggaagggaaa aactcagcct attagatttt atttaagata tgtcttcacc
81841 acggggctga agnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
81901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnggcggtga
81961 ctgtgacatt gaggttcggc gtcgggggag agggaaaagg agagggagag ggagagggag
82021 agggagaggg agagggagag ggagagccat atgtagttta aagtagtttt tttccaattc
82081 tgagaagaag gtcattggta gcttgatggg gatggcaatg actctataaa ttaccttggg
82141 cagtatggct attttcacga tattgattct tcctacccat gagcatggaa tgttcttcca
82201 tttgtttgta tcctctttta tttccttgag cagtggttta tatttctcct tgaagaggtc
82261 cttcacatcc cttgtaagtt ggattcctag gtatttttatt ctctttgaag caattgtgaa
82321 tgggagttca ctcatgatttt ggctctctgt ttgtctgtta ttggtgtata agaatgcttg
82381 tgatttttac acattgatttt tgtatactga gactctgctg aagttgccta tcagcttaag
82441 gagattttgg gctgagacga tggggttttc taggtataca atcatgtcat ctgcagacag
```

FIGURE 4 (cont.'d)

```
82501 ggacaatttg acttcctctt ttcctaatcg aatgccсttt atttccttct cttgcctgat
82561 tgccctggct agaacttcca acactatgtt gaataggagt ggtgagagag ggcatccctg
82621 tcttgtgcca gttttcaaag ggaatgcttc cagtttttgc ccatgatgta tgatattggc
82681 tgtgggtttg tcatagatag ctcttattat tttgagatac atctcatcaa tacctaattt
82741 attgagagtt tttagcatga agcgttgctg aattttgtca aaggcctttt ctgcatctat
82801 tgaaataatc atgtggtttt tgtcattggt tctgtttgta tactgggtta catttattga
82861 tttgtgtacg ttgaaccagc ccttgcatcc cagggatgaa gcccacttga tcatggtgga
82921 taagcttttt gatgtgctgc tggattcgtt tgccagtatt tattgaggat ttttgcatcg
82981 atgttcatca aggatattgg tctaaaatgg gttttttgtt gggtctctgc ccagctttgg
83041 tctcaggatg atgcctcccc tattaaaaga gggagggagg attccctctt tttctattga
83101 ttggaatagt ttcagaagga atggtaccag ctcctccttg tacctctggt agaattcggc
83161 tgtgaatcct tcaggtcctg gactgttttt ggttggtaag gtattaattg ttgcctcaat
83221 ttcagagcct gttattggtc tattcagaga ttcatcttct tcctggtta gtcttgggag
83281 ggtgtatgta tggaggaatt tttccatttc ttctagattt tctagtttat ttgcatagag
83341 gtgtttataa tattctctga tggtagttta tatttctgtg ggatcagtgg cgatatcccc
83401 tttatcattt tttattgcat ctatttgatt cttctgtctt ttcttcttta ttagtcttgc
83461 tagcggtcta tcaatttttt tgatcttttc aaaaaaccag ctcctggatt cattgatttt
83521 ctgaagggtt ttttgtgtct ctatttcctt cagttctgct ctgatcttag ttatttcttg
83581 ccttctgcta gcttttgaat gtgtttgctc ttgcttctct atttcttttc attgtgatgt
83641 tagggtgtca attttagatc tttcctgctt tctcatgcgg gcatttagtg ctataaattt
83701 ccttctacat attgctttga atatgtccca gagattctgg tatgttgtgt gtttgttctc
83761 attggtttca aagaatatct ttgtttctgc cttcatttca ttatgtaccc agtagtcatt
83821 caggagcagg ttgttcagtt tccatgtagt tgagtggttt tgagtgagtt tcttagtcct
83881 gagttctagt ttgattgcac tgtggtctga gagatagttt gttacaattt ctgttctttt
83941 acatttgctg aggagagctt tacttccaac tatgtggtca attttggaat aggtgtggtg
84001 tggtgctaaa aaaatgtat attctgttga tttggggtgg agagttctgt agatgtctat
84061 taggtccgct tggtgcagag ctgagttcaa ttcctgggta tccttgttaa ctttctgtct
84121 cgttgatctg tctaatgttg acagtggggt gttaaagtct cccattatta ttgtgtgggt
84181 gtctaattct ctttgtagat ctctaaggac ttgctttatg aatctgggtg cccctgtact
84241 gggtgcatgt atgtttagta tagttagctc ttcttgttga attgatccct ttaccattgt
84301 gtaatggcct tctttgtctc ttttgatctt tgttggttta aagtctgttt tatcagagac
84361 taggattgca acccctgcct ttgtttttcca tttgcttggt agatcttcct ccatcccttt
84421 attttgaacc tatgtgtgtc tctgcatgtg agatgggttt cctgaataca gcacactgat
84481 gggtcttgac tctttatcca gttttccagt ctgtgtcttt taactggaac atttagccca
84541 tttacttttta aggttaatat tgttatgtgt gaatttgatc ctgtcattat gatgttagct
84601 ggttattttg ctagttagtt gatgcagttt cttcctagca tcgatggtct ttacaatgtg
84661 gcatgttttt gtggtggctg gtatgggttg ccccttttcca tgtttagtgc ttccttcagg
84721 agctctttta gggcaggcct ggtggtgaca aaatctctca gcatttgctt gtctgtaaag
84781 gattttatgt ctccttcatt tatgaagctt agtttggttg gatatgaaat tctgggttga
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85141 ttttccaact tggttccatt ctccccgtct cttcaggta caccaattag atgtagattt
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85261 tctaaacttc tcttcatgct tcatttcatt gatttgattt ccatccccca atacccttttc
85321 ttccagttga ttgaatcagc tactgaggct tgtgcattca tcatgtagtt ctcatgccat
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85561 catccaggtt tgttctgttg ctggtgagga gccgtgttcc tttggaggag gagaggcact
85621 ctgattttta gagcttccag tttttctgct ctgtttgttc ctcatctttg tggttttatc
85681 tacctttggt ctttgatgat ggtgacgtac agatgggggtt ttggtgtgga tgtcctttct
85741 gtttgttagt tttccttcta gaattcagga ccctcagctg caggtctgtt ggagtttact
```

FIGURE 4 (cont.'d)

```
85801 ggaggtccac tccagaccct gtttgcctgg gtatcagcag cagaggctgc agaacagtgg
85861 atattggtga acagcaaatg ttgctgcctg atcattcctc tggaagtttt gtctgagagg
85921 agtacccagc cgtgtgaggt gtcagtctgc ccctactagg gggtgcctcc cagttaggct
85981 attcggggt cagggaccca cttgaggagg cagtctgccc attctcagat gtcaagctgt
86041 gtgctgggag aaccacttct ttcttcaaag ctgtcagaca gggacattta agtctgcagt
86101 ggttattgct gtcttttgtt tgtctgtgcc ctgcccctgg aggtggagtg tacagaggca
86161 tgcaggcctc cttgagctgt ggtgggctcc agccagttca agcttcccgg ctgctttgtt
86221 tacctactca agcctgggca atggcgggca cccctccccc agcctcgctg ccgccttaca
86281 gtttggtctc agactgctgt gctagcaaag agtgaggctc tgtgggtgta gaaccctcca
86341 agctatgtgt gggatataat ctcctggtgt gctgtttatt aagcccattg gaaaagcaca
86401 atattagggc aggagtgacc caattttcca ggtgccatct gtgaatgctt tctttgacta
86461 ggaaagggaa ttccctgacc tcttgccctt cccaggtgag gtgatccctc accctgcttt
86521 gggtcacgca tggtgtgcta cacccactgt cctgcaacca ctgtctggca ctccccagtt
86581 agatgaaccc ggtacctcag ttggaaatgt ggaaatcacc tgtcttttgc atcgctcatg
86641 ctgggagctg tagactggaa ctgttcctat tcagccatct tggctccacg tatatccact
86701 gccacacttc tttagtcata aagtgagtgc cttggtcaga ggcaatgctg tgtggaatac
86761 catgatggtg gataaggcat tctgtgagtc catgaatggt agtcttggca gagcattgtg
86821 ttcagtttag gcaaaccat atccagagta agtgtctgtt tcagtgagga caaacctctg
86881 cccttttcag gatggaagag gtccagtata accaaccttc caccaggtaa cagactgatc
86941 accccgagga atggtgccat attgagggct cagtgttagt ctctgctgct gtcaaattgg
87001 gcactcagct gtagccatag ccaggccagt tttggtgagt ggaagtccat gttgctgagc
87061 ccatgtataa cctccatccc tgccaccatg gccactttgt ttatgggccc attgggtgat
87121 aacaggggtg gctggggaaa gaggctgagt gatgtccaca gaacaggtca tcttatccac
87181 ttgattatta aaatcctcct ctgctgagat cacccattgg tgagcactca catgggatcc
87241 aaatatcttc acaggttttg gccactcaga gaggtccatc cacatacctc ttccccaaat
87301 ttctttgtca ccaattttcc aatcatgctt cttccaagtc cctgaccatc cagccaaacc
87361 attggctaca gcccatgaat caatatataa tcgcacatct ggccatttat ccttccatga
87421 aaagtgcaca accaggtgca ctgcttgaag ttctgcccac tgggaagatt tcccttcacc
87481 actgcccttc agtgatgtcc tagaaagggg ctgtagtgct gcagctgtcc actttttgggt
87541 ggtgcctgca tatcgtgcag aaccatctgt gaaccaggcc ctagtcttct cttcctctgt
87601 caactgatca tagagaactc cccatgaggc catcggtgca ggctggggaa gagaaggtgg
87661 ggtggcagtt gtggagacca tgggcatttg agctacttcc ttgtgtaact tacttgtgcc
87721 tttaggacct gctcgagccc aatcacatat atatcacttc catttgatga tggaatgctg
87781 ctgtgcatga cccatttat ggctacatgg gtcagaaagc acccagttca tgatagacag
87841 ttcagttcac atggtgactt gatgacccat aatcaaatgt tcagtttcca ccaaagctca
87901 gtaacaggcc aagagctgtc tttcaaaagc acagtagtta tatgcagaaa atggcagggc
87961 cttgtttcaa aattttagag gcatctgctg tgattcacct gtggggggcct gccaaaggct
88021 ccaaacagca tccctatctg ccactgatgc ctcaagcacc attggatctg ctgagtcata
88081 tggcccaaac agcagagcag gttggacagc agcctggacc tgaggcagag ccttatcctg
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88321 atcttgacag gccccacacc agtggacccc tagaaatgtt actgaggtag aaggtccctg
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88441 tgtgtttgct acttcttgct cactggatcc gatcagcata atgtcatcaa tgtaatggac
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88621 agctgaaggc aaattgcttc tagtgggcct tatgaatagg aatggagaaa aaggcatttg
88681 ccaagtcaat ggctgcatac caggtaccag gaaatgtgtt aatttgctca agcaatgaaa
88741 ccgtatctgg tacagcagct gcaattggag tcaccactta gttaagctta tgataatcca
88801 ctgtcattct ccaagatcca tctgtcttat gcacatgcca aatgggagag ttgaatgggg
88861 gtgtgatgaa aatcaccacc cttgcgcctt tcaagtcctt gatcatggca ctaatctctg
88921 caatccctcc agggatgtga tattgttttt gatttaccat ttttctaggt agaggcagct
88981 ctaatgcctt ccatttggc tttcccacca taataggcct caccctacca gtcagggagc
89041 caatgtgggt gttcttccag ctgctaagta tgtctatgcc aattatgcat tctggcactg
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FIGURE 4 (cont.'d)

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89101 gggaaatgaa cacaggatga gcctggggac ccattggacc cactgtaagt cagacctgag
89161 ctaaaactcc attaattacc tcacctccat aagctcctgc tttaactgga ggaccacaat
89221 gacgttttga gtcccttaga attaacgtca gctcagagct agtgtcctgt aatcccccaa
89281 atgactgata atttcccttt ccccaatgca cagttacctt gataaaaggc tggaggtctc
89341 cttgggaaaa aatgggagaa agattaacag cataaattgt tggtagtgta gtgggctcct
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89521 tccatttgac ctggaagttt tctgcttata taaattaagt aggaaagaag taggcatcct
89581 aacaatttca cttctgggaa cactgtgatt aattagcgaa tgccagaact ctacatgagt
89641 cagactattc tgattgctgc tttgccacta ctgtctgtta tggtagttat gcccaccttg
89701 cctttgatgg ttgagtgcca ccacttggcc tctgccacct tgggatccaa ttattcccat
89761 tgtatttacc tttattagtt gagtgactgt ggttctcacc attggatctg atatgcagag
89821 aattacgggg ctcttcaaag atgcaggtgc taccctcaca gatctatttt gcaaggtatt
89881 ggtcaagggt atatcttctg ggcccttcca tctgggatga gtaggtctaa agtgactaat
89941 ccactccacc atctcaatct ctctaagcct ttggatccct tcctctacat taaaccaaga
90001 gtgatcagac atttccagct ccctcacagt ggccatcttt caatccatat ttcagctaac
90061 taagcaaata aattattaga accttttttt aactccctga gctgcaatat taaatgcaga
90121 gtctctactt agtgggccca aatcaacaaa ttcagcctga tccaactcta tgttccttcc
90181 accattatcc cacaccctta atatccattc tcatgcctgt tctccagatt tctgtttata
90241 taaattagaa aactcaagta gttcttttca agtatagtga acctcctcat gggtttcact
90301 ctcaacctca cctcttgggg cccataagga ctttagtctg gttataggtc tagaagcaga
90361 cagggggtgtt gggggtggct cctgaggaga atcaacatta tttttgcctgg caactgctca
90421 ggggggggcca tcactgttgc cttaggcagc acagtgttta tctccccaga caaatatgga
90481 aaggctgatg gcagcatggg tcagggagag gatgtcacca ctactgggga tggggaagct
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90721 gccacttgca caataagagc tcatatccat tttcccacaa tttcagctct ttctctgcag
90781 gagataatac tttcactcag ggcaatctta gcagatttga ggctcagtat ctgcttctga
90841 agccaggagt tagaatccct aagttcattt tctttcatca ctttgtccat tgaacttagg
90901 agaaaccaac caacttcatt atgtttccac atatggtcaa aggtattatt tatagagtca
90961 ctaaactcct tgcctctcat gagcgctgaa tcaggaatgt caaatgcatt tattttgctt
91021 aactctctaa acagttcata gaaaggaaca ctgaatcagt gttctccata ctatcagaag
91081 tagagtcctt agcattttttg agtctaatca tattaaacag ccactccaga aaccctaaaa
91141 ccaatgaaag aactgcatcc ttaatgttct gttcctctag aaccactcct ggtacaaaaa
91201 tctgtgttag ggttctctag aggggcagaa ctaataggat agagatatat aagaaggaaa
91261 gtttattaag tattaactca catgatcaca aggtcccaca ataggatatc tgcaagctga
91321 ggaacaagga gagccagtcc aagtcctaaa ctgaagaact tcgagtctga tgttcaaggg
91381 cagggagcat ccagtaccag agaaagatgt aggctgggaa gctaggccag tttagtcttt
91441 tcatgttttt ctgccaactt ttcatattct agctgcactg gcagctgatt agatggtgcc
91501 cacccaggtt aagcgtgggt ctgcctttcc cagcccactg actcaaatgt taatctcctt
91561 tggcaacacc ttcacagaca cacctaggat caatactttg catccttcaa tccaatcaag
91621 ttgacactca gtattaacca tcacagaagc attatctact aataccacca tataaaagat
91681 gcggatgtta gcatagttat cacactgttt cctcacacaa tccactaccc atggcttggt
91741 ttctatggac atattattgg atctgagcca gcttattata atgtttttaaa taatattcaa
91801 gaattgttac aattgcattt tgaattgtta ttatttaaat ataggtcaat ttctaaatag
91861 attcttgtcc atagtcagat tttacatcat gatttcctca ctcatgacat ttaaaagttt
91921 atttgttaaa tttagccaat atatacaagt ctgcatttgg ggatgggtaa ttgaatgcca
91981 tttttaattt ttgggtaatg gagacttttt ttatgttgcc tttatatttg atccataact
92041 aggctatgta gtacatttct gggtcaaatc tctattgctt taaaactttg tggttttgct
92101 tcattatctc ctagtatcta cagttactga agtgatacgt acaaccagct ttggacatga
92161 tgaatgtttt aggctaaaga cttgggtgtt ctttggtctt tggaagtttt ctttaatact
92221 ctctttaaat ttgtctgatt ccacttcttg gttccctttt caggaacacc aagtattcac
92281 acagtggata gtcatctgtc ctctacttct aaaattttgt tatttaacaa aatgttataa
92341 aagtagaatc acatttatgt aacctttttg gattgatgtt ttttgctcag cataatttcc
```

FIGURE 4 (cont.'d)

```
92401 tggcaatcca tccaagttgt tgcatgcatc aatcatccat tcctttacat tgctaagtag
92461 tattccatgc tatgtattta caacagtttg tttacccatt cacctgttga aaaacatctt
92521 ggctgaatct agttcttagc tattaatatt ataaacaaag atgctataaa catttgtttg
92581 acagtttttt gtgtgaagtt tttatttttc tgggataaat gcctgggagt gcaattgctg
92641 ggtcatatga tagttgtgtg tttttctttg agaaactccc aaaatttccc agagtggatg
92701 aagtattta tgtttctatc agtaatgtat cagtgatccg gtttctacac atccttacca
92761 gcatttggtg gtgtcatgat ttttaatttt agccattctg atagatgagt agtgatagct
92821 tattgttgtt tcaatttgca tttccctaaa acctaataat tttgaacatc ttttcatgtg
92881 attatttgct gtccatgaaa tatctgtgga aacagtgagt agaaggatgc tttccacagt
92941 ctgagaagga cagctgggag aggtggatga agagaggttg gtatatgggt acaaaaatac
93001 aattaagacc tctggtccat gctgggcaca gtggctcatg cctgcaatcc cagcactttg
93061 ggaggccaaa gcgggtggat cacctgaggt caggagctta agaccagctt ggccaacatg
93121 gtgaaaccct gtctctactg aacatacaaa aattagccgg gcatggtggt gcgtgcctgt
93181 aatcccagct actcaggagg ctgaggtggg agaatcactt aaacccggga ggcgaagttt
93241 gcagtaagcc gaggtcacac cactgcactc cagcctgggc aacagagcac tccagccggg
93301 gcaacagagc aagactctgt ctcaaaaaaa taaaataaaa taaagtaaaa caaaataaag
93361 agttccaatc cagcagagag tgtggtgaga tggtgcggga ccagctccct gggacttctg
93421 agcctttgcc ctggccagtg ggggagctga gccaggatag gctgtagcct ctgccccgtg
93481 acaccaggac ccttgtggtg gctgccacca ggacccttgg ggtgggtgcc tgggccttga
93541 agatgcagca agcctccctt cccctacac ctcagtgact gagggtggtg gtggccttc
93601 ccaggccgca ccctgccggg tatagacgaa gtccccactg agcctggatg cagtgccttt
93661 gggtggtggt gggagtggca ggggcagctt ggtgactatc cgggtgtgag gattgggaag
93721 gtgctcttgg gatgcaggac acgggctcag ccacctcttt aggccatggc gctgccagat
93781 ccgggtcctg gtgaccactc tgtcccagct gggtgagact tacctagtcc tgaggacaac
93841 agacaatggc cttaataggc ctggaaggtg agtggaggca cagaggagga cagtgtggaa
93901 cagttagcag gcattgggct gttggtcttc cttctaccag acctggaagg acctcacatt
93961 tggcctatgg gaaatgcccg ccacactttg ggaagattta ctatctgctt ctagaaggct
94021 gtgtgtatat tatgaaaaag ctattctcaa ctcacccca acctttaat agataacatc
94081 tgtggggagg ctgacaagat ggctgaatag aaacagctca ggtgtgcagc tcacagtgag
94141 atcaatgcag. aaggtgggtg atttctgcat ttccaactga ggtacccggc tcatctcatt
94201 tggactggtt agacagtggg tgcagcccat ggagggtgaa ctgaggcagg gtggggtgtt
94261 gcctcacctg ggaagtgcaa ggggtcagaa aactcccctg ttagccaagg gaagctgtaa
94321 ggagctgtgc catgaggagt ggtgcattcc agcccagata ctatgctttt cccatggtct
94381 ttgcaaccca cagaccagga gattccctcc agtgcttatg ccaccagggt cttgggtttc
94441 aagcacaaaa ctgggtggcc atttgggtag acaccaaggt agctgcagga gtcttttttc
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94561 gccgaagcca gggaaccagg tggtctagct cagtggatcc cacccccatg gagcccagca
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94681 gatgctggag cttggtatgg ggaggggcgt ctgccattac tgaggcttga gtaggcagtg
94741 ttcctctcac agtgtaaaca aaactgcaag gaagttccaa ctgggtggaa cacaccacag
94801 cgctgccagg ctgctgtagc aagactgcct ctctagattc ctcctgtctg ggcagggcat
94861 ctctgaaaaa aaggcagaag ccccagtcag ggacttatag ataaaactcc catctctctg
94921 ggacagagca cctgggggaa ggggcagctg tgggtgcagc ttcagcagat tttaacatcc
94981 ctgcctgcca gctctgaaga gagcagtgga tctcccagca cagtgtttga gcagactgcc
95041 acctcaagtg ggtccctgac cccctggcct cctgaccggg agataccttc cagaagaagc
95101 caacagacac ctcacacaag agagctccag ctggcatctg gcaggtgccc ctctgggaca
95161 aagctttcag aggaaggaac aggcagcaat ctttgctgtt ctgcagcctc cactggtgat
95221 acccaggcaa acaaggtctg aagtagatgt ccagcacact ccagcagacc tgcagcagag
95281 aggcctgact gttagaagaa aaactaacaa acagaaagga atagcatcaa catcaacaaa
95341 aaggacatcc actcagaaac cccatccaaa ggtcaccaac atcaaacaca aaaggtaggt
95401 aaatccatga agatggggag aaaccagcac aaaaaggctg aaaattccaa aaaccagaat
95461 gcctcttctt ctccaaaaaa tcacaacttc tcaccatcaa gggaacaaaa ctggatggag
95521 aatgaatttg atgaattggc agaagtaggc ttcaaaggtg gataataaca aactcctctg
95581 agctaaagga gaatgttcta acccaacgca aggaagcaaa gaaacttgaa aaaagattag
95641 atgaattgct aactagaata acgagtttag agaagaacat aaatgacctg atggagctga
```

FIGURE 4 (cont.'d)

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95701 aaaacacagc acaagaactt agtgaagcat acacacatat caatagctga atcgatcaag
95761 tggaagaaag gatatcagag attgaagatc aacttgcaga aaccctataa gccagaagag
95821 actaggggcc aatattcaac attcttaaag aaaagaattt tcaatgctga atttcatatc
95881 cagccaaact aagcttcata agtgaaggag aaataaaatt ctttacagac aagcaaatgt
95941 gagacatttt gtcgtcacca cgcctgcatt acaagagctc ctgaagggag caataagcat
96001 ggaaaggaaa aaatggtgcc agccactgca aaaacatgcc aaatggtaaa gaccatcaac
96061 gctatgaaga aactgcatca agtaatgggc aaaataacca gctagcatca taatgatagg
96121 atcaaattta cacataacat attaacctta aatgtaaatg ggctaaatgc cccaattaaa
96181 agacacagac tggcaacatg gataaagagt caagacccat cagtgtgcag tattcaggag
96241 acccatctca catgcaaaaa cacacatagg cccaaaataa agggatggag gaatatttac
96301 caagcaaatg gaaagcaaaa aacaaacaaa caaacaaaca aacaaacaaa caggggttgc
96361 aatcatagtc tctgataaaa cagactttaa accaacaaag atcaaaagag aaaaagaaag
96421 ccattacata gtggctaaga agagctaact atcctaaata tacatgcacc aatacagga
96481 gcacccagat tcataaggca agttcttaaa cacctacaag gagacttaga ctcccacaca
96541 ataatagtgg gagatttttaa taccccactg tcaatatcag acaggtcaat gagacagaaa
96601 attaacaagg atatctagga attgaactca gctccagact aagcagacct aatagacatc
96661 tatagaactc tccaccccaa atcaacagaa tatacattct tctcagcacc acatcgcact
96721 tattctaaaa ttgaccacat aattggaagt aaaacactcc tcagcaaatg cagaagaatg
96781 gaaatcataa caaacagtct ctcacaccac agcgcaatta aattagaatt cagaattaag
96841 aaactcactc aaaacctcac acttacatgg aaactgaaca acctgctcct gaatgactgc
96901 tggataaata atgaaatgaa gaaggataaa gatgttgttt gaaaacaata agaataatgt
96961 accagaaact ctgggacata tttaaagcag tgtgtagagg aaaatttata gcagtaattg
97021 cctacaaaag aacacaggaa agatctaaaa tcgacaccct aacatcacaa ttaaagaac
97081 tagagaagca agagcaaaca aattcaaaag ctagcagaaa acaagagata actaagatca
97141 gggcagaact gaaagagata gagacatgaa aaaccttaa aaatcaatta atcgctctcc
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97381 cgattgcagg tgcgcgccgc cacgcctgac tggtttttctc tgcccggcca gccgccccgt
97441 ccgggaggga ggtaggaggt cagccccccg cccggccagc cgccccatcc gggaggtgag
97501 gggtgcctct gcccggccgc ccctactggg aagtgaggag cccctctgcc cagccaccac
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98461 agaggtaacc ttgtaatgcc aaggcagaaa actgccacca aaccacaaaa agcttgttca
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98581 aggagctggt ttttttttaa agatcaacaa aatagataga ccactagcca gactaataaa
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98701 tgatcccaca gaaatacaac ctaccatcag agaatattat aaacacctct atgcaaataa
98761 accagaaaat ctagaagaaa tggataaatt cctggacaca tacaccctcc caagactaaa
98821 ccaggaagaa gtcaaatccc tgaataagcc aataacaaac tctgaaattg aggtggtaat
98881 taatagccta ccaaccaaaa aaagtccagg accagacgga ttcacagctg aattctacca
98941 gaggtacaaa aggagctggt accattcctt ctgaaactat tccaaacaat agaaaaagag
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FIGURE 4 (cont.'d)

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 99001 agaatctccc taactcattt tacgaggcca gcatcatcct gataccaaag cctggcagag
 99061 acacaacaaa aaaagaaaat ttcaggccga aatccctaat gaatattgat gcaaaaatcc
 99121 tcagtaaaat tctggcaaac cgaatccagc agcacatcaa aaagcttatc caccatgatc
 99181 aagttggctt catccctggg atgcaaggct ggttcaacat atgcaaatta atgaacgtaa
 99241 tgcatcacat aaacagaacc aatgacaaaa accatgtgat tatctcaata gatgcagaaa
 99301 agaccttcga caaaattcaa cagcccttca cgctaaaaac tctcaataaa ctagatattc
 99361 atggaacatg tctcaaaaca atcagagcta tttatgagaa acccacagca gccaatatca
 99421 tactgaatgg gcaaaaactg gaagcattcc ctttgaaaac tggcataaga caaggatgcc
 99481 ctctctcacc actcctattc aacatagtat tgggagttct ggccagggca atcaggcaac
 99541 agaaagaaat gaaggatatt caattaggaa aagaggaagt caaattgtct ctgtttgcag
 99601 atgacatgac tgtatattta gaaaacccca tcatctcagc ccaaaatctc cttaagctga
 99661 taagcaactt cagcaaagtc ttgggataca aaatcaatgt gcaaaaatca caagcattcc
 99721 tatacaccaa taacagacaa accgagagcc aaatcacgag tgaactccca ttcacagttg
 99781 ctgcaaagag aataaaatac ttaggaatcc aacttacaag ggatgtgaag gacctcttca
 99841 aggagaacta caaatcactg ctcaatgaca tcagagagga cacaaacaaa tggaaaaaca
 99901 ttccatgctc atggatagga agaatcaata tcgtgaaaat ggccataata tccaaagtaa
 99961 tttatagatt gaatgctatc cccatcaagc taccactgac tttcttcaca gaattggaaa
100021 aaactacttt aaatttcata tagaaccaaa aaagagcctg catagccaag ccaatcttaa
100081 gcaaaaataa caaagctgga ggcatcacac tacctgactt taaactatac tacatggctg
100141 cagtaaccaa aacagcatgg tactagtacc aaaacagata tatagaccaa tggaacagaa
100201 cagaggcctc agaaataaca ccacacatct acaactatct gatctttgac aaacctgaca
100261 aaaacaagca atggggaaag gattctctac ttaataaatg gcattgggaa aactggttag
100321 ccatatgcag aaagctgaaa ctagatccct tccttccact gtatacaaaa attaactcaa
100381 gatgggctaa agacttaaat gtaagaccta aaaccataaa aaccctaaaa gaaaacatag
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100501 tggcaacaaa agccaaaatt gacaaatggg atctaattaa actaaggagc ttctgcacag
100561 cgaaagtaac taccatcaga gtgaacaggc aaccaacaga atgggagaac attttttgcaa
100621 tctatccatc taacaaaggg ctaatatcca gaatctacaa agaacttaaa caaatttaca
100681 agaaaaaaca aacaattcca tcaaaaagtg ggtgaaggat aagaaaagac tcttctcaaa
100741 agaagacatt tatgcagtca acaagcatag gaaaaaaagc tcatcatcac tggtcattag
100801 agaagtgcaa atcaaaaaca caatgagata ccattcatg ccagttagaa tggccatcat
100861 taaaaagtca agaaacaaca gatactagag agcatgtgga gaaataggac cacttttaca
100921 ctgttggtgg gagtggaaat tagttcaacc attgtggaag acagtgtggt attcctcatc
100981 ttcaccacgg ggtggaggta cgnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
101041 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
101101 nnagaaacat agaccctgcc caacgcatat tcctgaaagg gatggcaagg ttttttttaaa
101161 ggttttatgg gtttaggtgt actctaaagg attttaaccc ttctaaaatt attttttgtat
101221 aaaggtgtaa gaaagggatc caacttcact cttttacaaa tgggaagcca gttttttcccg
101281 gccccttttt ttaaaaagga ttcccttttcc cattggttgt ttttttcaag gttgtcaaag
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101461 gtttgaagtc aggtagcatg atgcctccag ctctgttctt ttggcttagg attgtcttgg
101521 caatgcgggc tctttttttgg gttccatatg aactttaaag tagttttttcc caattctgtg
101581 cagaaagtca ttggtagttt gatggggatg gcattgatct ataaattacc ttgggagtat
101641 ggccattttc atgatattga ttcttcctat ccatgagcat ggaatgttct tccatttgtt
101701 tgtgtcctct tttatttttgt tgagcagtgg tttgtagttc tccttgaaga ggtccttcac
101761 atcccttgta agttggattc ctaggtattt tattctcttt gaagcaattg tgaatgggag
101821 ttcactcatg atttggctgt ctgtctgtta ttggtatata agaatgcttg tgattttttgc
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101941 gctgagacga tggggtttttc tagatataaa atcatgtcat ctacaaacag ggacaatttg
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102061 agaacttcca acactatgtt gaataggagt ggtgagagag ggcatccctg tcttgtgcca
102121 gtttttcaaag ggaatgcttc cagtttttgc tccttcagta tgatattggc tgtgggtctg
102181 tcataaatag ctcttattat tttgagatac atcccatcaa tacctaattt attgagagtt
102241 ttcagcatga atggttgttg aattttgtca aaggcctttt ctgcatctat tgagataatc
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FIGURE 4 (cont.'d)

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102301 atgtgttttt tgtcattggt tctgtttata tgctagatta catttattga tttgcgtatg
102361 ttgaaccagc cttccatccc agggatgaag cccacttgat catggtggat aagctttctg
102421 atgtactgct ggattcggtt tgccagtatt ttattgagga ttttcgcatt gatgttcatc
102481 agggatattg gtctaaaatt ctctttgttt gttgtgtgtc tgccaggctt tggtatcggg
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102601 agtttcgcca aactgacatg atttttaaaa ttccctatag ggtcaatgtg cagatttaaa
102661 gatccctaca ctcagtagtc ctgggatagg gtcgggggat ccatatgttt aacaagcagc
102721 ctagagtctc ccgatagcct gggcaagctt taaaaagccc tgcggacatt cggatgaaac
102781 aaaggtgcac agaacctata tctctgccat ttattagctg ggggccttag gcaaggaagg
102841 tagtcaacct ccgtattcct cagttcctca actgtaaaat ggggatgatg actgtggctc
102901 cctcgtgggg ttgtgacgga ggaacagggg acatatgtcc tgggatcagc actggcaatt
102961 tggccattct taccatagca cctgccatct tggtgacagc ctggacacaa agccttcaca
103021 cctttgaagt ggccatagag agcatgagat atggatgggg aggaggcatt ccaactaaag
103081 acccctgctt tgggccaaaa acacatgtat gtctggtgtc tggagtcctc tggttatgcc
103141 ttttttaaga taccggttgt cctgcaattg tgcgttgaga atccactcta tggccaacat
103201 atcatcaaag cgtttggctc agctaggctg ttcccccaac ccaaggaccc catgaggaaa
103261 ggagtgaggg ttccacccccc agcaccagcc actggagggg ctgcccagag tccctcagtt
103321 ctcgtaaact tacgctttgg agtaattcag aacaaagtcc actccttttt cactatcaaa
103381 ctggatatca cggggtaaat ccttgtggca tttggcatcg atgctcaagg ggaagccagg
103441 gttccactcc atccatctga gcatgagaaa ggagaagaaa ttgagttaaa tgccagcctt
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103561 gatgtactca aaataaagtc aacacatcat aggctgaccc tgtgtccagt aaggttctgg
103621 gacctcttcc aaagtccagt cgcaccaact ttgctgtgcc ctgagcatca gagtgggaac
103681 cctgagactg ggcttatagt ggtacaggtg tgcaccactg cataaaaagt tctgtaggta
103741 gtctagggag acctcactta ctagaggtga cattgaacag tagaggcctg ccttgccagt
103801 cactggaggt agaaggtatt aaggctgccc agccacgccc aacctggaca tccaccattc
103861 tgccaacttg atcagtgtgt gccctggact gcgtgcatgt cctgcatgtg gcatttgggg
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104101 aacatgctca gatcctgaca tccttgaaac gtatcccgtg gcattgggca tttgtgtttt
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104281 agacctactg ggcagcattc ccaggaggtt aggcattcta agtcacagga tgagacagga
104341 cattgatgca agatacaggg cagaaagacc ttgctgataa aatgggttgt ggtaaagaag
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104761 actttatgga ttcaccctga attctttcct gtggaggtcc aagaactctc tcttgggggtc
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104941 ttcatttata ttcctaattc tccttccttt taaaattttc ttttgagagg aaagtaaaat
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105061 tttccccaaa tcccaactgt cacagtgtcc tcttggccca gtagcctctc cttaggatca
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105181 tttctgttat gtggcacctt acatttctca ctgttggttt atttagaata ttctacgtcc
105241 tcagatttta agaaaacctt ccattttgtc tgtttgtatt aatgccaatg atagtatatt
105301 aacaaggata aaaatgtgga caagtctaca catttttgt ttgtttgttt tggaaaatga
105361 ctcaaggcat ctccaatata tatctaaaat tgagccattc agtagcctca ctggtagtaa
105421 tgatcaatta attagctatc attagtcata tcaatttaaa tattactgat gattttctct
105481 ttgcctggac agttcaaggg ctctagttaa tttttaaaagc tcagtggagc tagatgtttt
105541 tcagtatgta aacaatgagc catgcaaggg catctgtgcc agcaaatggc attaatgttt
```

FIGURE 4 (cont.'d)

```
105601 tcttaagtga atagtccact tggacggatg tggaatactt cttcagcacc aaaaagacct
105661 tcttgcccca tgccctgccc tggtctatgg agggtggcag caccaatggg cagaaatgcc
105721 ccacttgtgt ggttagaaga tgatggcctc acagcacatg gagacaggac agcttgcttg
105781 ctagttcact actgcccccc tgaaaccaaa tgtttatgtc ccttccactg caggtcactg
105841 ctgcttaaga gaccctgaca ggctgacctg cacaggagcc gaaggcctgc atggccacag
105901 acattaactg gtggagatgg aatcccactc cattgaggaa gaccaagtgg aacacccagg
105961 cagaaggaac aaagaagtag aaaggcattt aatttattgg aaaaaaaatg agagagagag
106021 agaaagagag agagagaaag caagagagac agagagacag agagagagag agagagaaag
106081 agagagagag aaagcaagag agacagagag acagagagag agagagagag agagagacag
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106201 gtaaccacaa acatgatttc tgaatgaaga cttcaataga gaaacagaca aagagaataa
106261 tcactgtgag atgtttggtc tcttgtatta aaagaaaagc tttagacaaa ttaaatttag
106321 cagtttaatt gagcaaagaa caattcaaga atagggcagc ccctaaacca gagcaggctc
106381 cgagtgactt tgatgctgtc tcatagttgg ataggattta tgggcagaaa aaggaacgtg
106441 atgtacagaa aatggaagtg aggtacagaa acagccagat tggtgatggc tcagcatttg
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106561 gattggctga gacttggtta cttgctatga gagtaggtga cagtctgttt acacatccag
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106681 gaaaagttta agctaaactc attaacacct agaagagaga aggtgttcat tcgacaacta
106741 attatgggagc acctactatg tgccaggaag tgctttgtgc aaaatagaag aacatgtaac
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106981 gcctcattgt actctcctcc tcttggaatt caggcacaac tgatcagcat tcacatcaac
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107221 tgccaatcag aaactctttg aatctgccta tgacctggaa gctcccctcc cccaagttgt
107281 cccacctttc caaaaccaaa ccactgtcca tcttacatgt attgactgat gtcttatgtc
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107521 atatgcaagg agtaaaagct ccaaaaggag agagagtaat atatggagaa gtgaaaaaaa
107581 tcaaagaaat aaaagaagaa ctcctttaag ctgaaaaata cttcaatatc ttaagtctgt
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108061 aaaattgtgt acttctcaat atcccgccct tttccctta aatttggagc cctcaaaatc
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108661 tcctaaatac agcaaagaat atgcattata aaactacagc aaatataata gtaaacaaag
108721 aaacaaaaat atgagaggga tgttcatcac tactaccact acttgttttg ggaattccag
108781 acatggaata agaaaagaat atcagtggtg tagataatgg aaagtaagag acaaaattat
108841 taacatttag ataatatgag cacattaact aaccagactc actaacaaca aacaaacaaa
```

FIGURE 4 (cont.'d)

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108901 aacaagtgat tagaaccaat gaaagaattc agtaagggac caacacacag taaatgtaag
108961 aaacaagtaa tttacattta tcccagcaat attttttgcaa acagaaaaat atcctactca
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109081 agaaattcta tggaagtacg ttgacacagg atctagagag gtggaaagac acgctgtgtt
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109201 caaagtaatt ctcattatga aaaacttaag aaagaacagt gagatatgta acagacatta
109261 acatttatta gaaagttatg ataaccaaaa gctggtgctg gggtctcgag tagaaaaata
109321 ggctaacaca taaagtgcgg aaacagaccc agagactatg tatacataat acaaaactcg
109381 ccaacactta tccagtgctt tctatgtgcc tactactatt ctctgtgttt tcatggttta
109441 acctattatc tcaaacccct aaaaggaagg cactgttatt tccctcattt tacagatgag
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112021 aaatagaata tataaaatat gtatggatat gtatatatgc acacacacac tcacacatgc
112081 agaaaaatgt acaaacacc tgtacgaaca ccatccaggt aaaaaatcag aacattgtcc
112141 gtaccctcac ccccaccttt cccaatcaac cctccttcca tccccggtaa tgaccatcct
```

FIGURE 4 (cont.'d)

```
112201 cggctttatg ataatcattt tcttgttatt gtttaaggtt ccgctatgac acacctccct
112261 aaacaatttc attccaaagt tatgaattgg ccagacacgc tcctggcttc tttccttcaa
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112381 gaattttcct tgacaatttg tctgttctac tgtttgttgg acattgagtt gttgccattt
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112561 ctaaattgtt ttccacggag gtcttaccaa cttgtcctcc tgccggtggt atatgagtgt
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112801 aaacttcttg cccattttct agtgaatgac actcccttc ttaaagattt gtaggtcctt
112861 cacatactag gaataattct cgtcaatcac tccatgactt gccttcactc tctcctggtg
112921 tctttcaatg aacagagtgt ccttatcttg agggaggcaa acttaccaat cttttccttt
112981 gtgtttaata tgttctgagt cttgtttgaa aaatcctttt agcttgagac ctggaagaat
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113101 caagctgagt ctcctgaatg gcaagaggtg gagtctgatt tcttctcctt ctccttcagc
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113221 cagccgagcc ctccgtagca gacccagtac ccacatacgt gtggctgttt gttgtttctt
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114121 gatgcaaagt ggtatatata gcacaatccc aaattttaaa aagtgaataa gacaaagtga
114181 aaacaattaa acatgaattt ttatgaaaaa gttcataaaa ttcataattc atacagaaaa
114241 taggtatttt tctggctcta tattatttc cttctttac tttttgagt taaaaaaaca
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115081 agtgcagtgg cgggatctag gctcactgca acctccgcct cccgggttca gtgattctc
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115381 tttgtttatt cattcctcag ttaatggaat ttaggttgtt tctactttt gactattgtg
115441 aacaatggtg ctataaatat gtgtgtacaa gttttgtata gacatgtggt ttcaatattc
```

FIGURE 4 (cont.'d)

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115621 agggttccag tttctccaca tccttggcag cacttgttac tatctgtctt ttttattcta
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116161 tttttaaattt atctagcagc gttattgaaa tataatgcac atactgtaaa atttatccat
116221 ttaaagtgtt caattcaagg atgtttagta ttaatttta cacaatggac aaccatcagt
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116341 accacttcct cattccctgc ccctaggcaa ccagtaatct actttatatc tgtacagatt
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116641 atgtacaagt tttgtgtgg gcatatgttt ccatttctgt tgggaatatg cttaagagtg
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116821 ccttgtcaac acttgttctt gtcggatttt tttattctag ccatcctagt atcaagtggt
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117421 gctgcttctg tcaaaaatta attggccata agtgtaaggg cttatttctg gactctcaag
117481 tctatttcat tgatctatat atctatcctt atgccgatat cacattgtct tgaatactat
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117961 aaaacaattg attatcttgt atcttgcaat cttggtggtt tattagttct aataatttct
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118201 tttctggatt cagcctttca tcattaagta taatgttaac tgtgaatttt cttttttttgt
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118441 gtttcaccat gttggccagg atggtctcaa tctcttgaca tcgtgatcca cccgccttgg
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118621 gaatgggtgt tggattttgt caaatgcctt ttttgtatgt ctattgaaat gattatgtac
118681 tttgtttttgt tttgttattt actctattga tatggtgaat tcaattaatt gattttttgga
118741 tgttaaacca actttgcatt cctgggctaa atcccacatg ttcatattgt ttaatgcctt
```

FIGURE 4 (cont.'d)

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118921 gagacaatga attgggaagt gttccttcta tttcttaaaa gagtttatgc aagatcagta
118981 ttaattcttt aaatgtttga tagaattagc cagtgaagct atctgggtct gggcttctat
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119101 taactatttc ttcatgagtc agttttggca gtttgcgtct ttctaggaat ttgcgcattt
119161 catttaacta gtttgttggc atgcaattgt tcatagtatt ctttttttatt aattttaatt
119221 tctgtattga ttttccctca ttttatgagt ctcattttttc ctttttttatt cattttaatt
119281 tctgtattga ttttctctta ttgctcattt taatggtttg aatcctctgg tcagttggct
119341 gaagagttgt caattttatt gctgatcatg tatcactttt ataattgaat tgttataaga
119401 agacataaga agtaagaggc aaccctaca atggagaaca ttaaggtaca ctcaagcttt
119461 tctgcccatt cttcctacat gccaatatgg ttgatccaaa gttattttca ttactctcct
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119761 aatgtgaatt tggtcatctc gggccaactt tgctgtaaag aaagaacaac atgagaggag
119821 cctgaggaag aacaataaca atgcccaatg ccaagtgttc aggcttccct cagatgccct
119881 gcccatgccg agtgctttat gtgcatgacc tcatttgagc ctcagagcac ttccccaatt
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120181 cccccacccc atgacagacc ttggtgtgtg atgttcccct tcctgtgtcc aagtgttctc
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121861 attcttgcac attgattttg tatcctgaga ctttgctgaa gttgcctatc agctttaagg
121921 agattttggg ctgagacaat ggggttttct aaatatacaa tcatgtcatc tggaaacagg
121981 gacaatttga cttcctcttt tcctaattaa atacccttta tttctttctc ctgcctgatt
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```

FIGURE 4 (cont.'d)

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122221 ttgagagttt ttagcatgaa tggttgttga attttgtcaa aggccttttc tgcatctatt
122281 gagataatca tgtggttttt gtctttggtt ctgtttatat gctggattac atttattgat
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122461 atgttcatca gggatattgg tctaaaattg ttttttttgt gtgtgtatct gccaggcttt
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122581 gattggaata gtttcagaag gaatggtacc agctcctcct tgtacctctg gtagaattcg
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123661 cctccctccc ggacagggtg gctgccgggc ggagacgctc ctcacttccc agacggggcg
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FIGURE 4 (cont.'d)

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FIGURE 4 (cont.'d)

```
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128821 actgagcaaa aacgggagtt cactctgggt tttagtgttg cctgtgagag cagcagttct
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129061 gaagctgtgt gaccaagagt tgccctgacc ccctcacatg taaaatggag atgataatgc
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129181 cgcctggcac gcagtaaatg ccaatggatg ggaacaatga tcattatcat tatgcctata
129241 gtcatcactg gcctgagggt tctgctcctc cctctaagcc tagctctgag agcatcttat
129301 ctctcagcct gtcctgctgc cgtctctcac tgcaggagtt ggagcaggta gcaggtagct
129361 aagggcgggg ctgcttctca gagcctttag agcagatgag gtcatatcat gaccactctt
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129481 cccagatctc ctgaaaacag gtcctggaat agtttctcta gctctcgtgg taaagcattg
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129721 acccctcctc tgagtctttg tattttattt tgtatttatt ttattttat tttttttaag
129781 agacagggtc tccctctgtc tcccaggcta gagtgcagtg gcatgatcat agctccctgc
129841 agccttgaac ttcaggactc aagtgattcc ccaacctcag cctcctaagt agttgggact
129901 ataggcacac accaccacac ctggctaatt ttttttttt ttttgagaca gagtcttgct
129961 ctgttgccca ggctggggta cagtggcatg atctcagctc actgcaagct ccacttccca
130021 ggttcacgcc attctcctgc ctcagcctcc caagtagctg ggactacagt tgcccaccac
130081 cacatccagc taattttttg tatttttagt agagacgggg ttttactgtg ttagccagga
130141 tggtctcgat ctcctgacct tgtgatccac ccgcctcggc ccctagctaa ttttcaattt
130201 tttttgtaga gatggggtct ctctacattg cccaggcttg tgacaaaatc ctagactcaa
130261 acaatcctcc cgccttagcc acccaaagtg ctggaactat aggcttcaac ctctgtactg
130321 atctaattgc agacctggac gcagttagtt ctcagatgac actcaggcca cattctgagc
130381 tgtccacccg acagcacttc caggctgaga catcttcatc cttgagcttg gaactggggt
130441 ccaaaaagga atattaacgg gatacctctg catcctcccc tggggatgta aagccagcca
130501 ggaggggagg cttgaggcca cagaaggcaa gctgagtatt aatggtgaca ataactgtta
130561 tcattggcta tgggggtaat tctggaggca ctcaacattc atcatctctt atctacctta
130621 aggaaccagc taatctcttg ggcaccttga ctctgaggag ctggatctct tcagtttcac
130681 tggtatgaat aagtcagtac atgcggaatt gcaacatgcc aagtttcaaa aagagaatag
130741 ttctgtctcc cctggtcccg aaggtgtttg aagaatttat ccaatggctg atgaagttct
130801 gggagcacag caggatgaga aagcctggac tgacggcaga agagctcagc agggcaggtt
130861 ccaaggactg acacagtgcc ttaatgaagc tgtcccttca cacagatgct ctggatctgt
130921 ggggccacag taatggccct ctgacattca tgttcaccca aggtgtagtg gtgaaatatt
130981 agatttaagg ggtgatcata tggtgagtaa ttgaatcact tgtaggctgg ccccctcat
131041 ttccaggttg ttcaagggat tggttgtttt gccatgtggt ggattaataa ttggccacag
131101 ctggacatgg tagctcatga ctgtaatccc agcactttgg gaggccgagc cgggtggatc
131161 acctgaggtc aggagttcca gactagcctg gccaacatgg caaaaccctt tctctagtaa
131221 aaatacaaaa attagccagg cttggtggct acctggagcc tgtaaaccaa gctccctagg
131281 aggctgaggc aggagaatcg cttgaacctg ggaggcagag gttgcagtgg gctgagatcg
131341 tgccactgcc ctccagcttg ggcaatagag tgagactctg tcccaaaata ataataataa
131401 taataataat aggccacaaa ttctttgaca ttccttccat tgagagatgg gggggtctgc
131461 atccccaccc ccaccccgg agtctgggtg ggctctgtga ctgcttggac cagtagaata
131521 tgatggaagt tacagtgtgc cagtttccag cccaagcct gaagagattg gcagcttcca
131581 ctttctgtct cttagaaaac ttgctcttgg aagccagcca tcatgtaaga aatgcaggca
131641 cccagaggac accattctgt gagaagcctt aaagaatgag actccatatg gacagagagg
131701 ccaaggagcc tagaggtgcc agacacatga cagaagaagg cccagccccc ttcagctgat
131761 gctacatggc cacagatgaa ctgcccagtg aagcctttcc taaattcctg acctgcaaga
131821 gcatgaacaa aattaaatgg ctgtttaaag ttaccaagga ggttggtttt acagcagtag
131881 agagaatgga acttgctgga cagcttctct atgctcaccc tccaacctgt gctgtccctg
131941 aaagtgattg gaatgagatg cctcaatggg ttttccactg ggaactctga ccagaaagga
```

FIGURE 4 (cont.'d)

```
132001 gggaatgtgt agaggaagga gaggccaatc actccccaga acctttctac tgagggccgc
132061 agctcctcca agggtgctgt ctccaggata cttctgcatt actcccacaa ccttccccct
132121 cccctgcat caggactagt ggtgctgatg gccccgcact ctgcatggtc cctctgcaca
132181 tgggcccaca cctttgtgat gcccctttgt taaaccctca tcctagtgta ccatctgttt
132241 tttgccaaga tgagctgaag ggtctgcagg aagaagggct tcataaccga gaccttgggt
132301 agatgtgcag gagggagttt cagagccagc attttctaac taccagaaaa agagaagtgc
132361 cctgtccaca accttccaca ttctgttgac cacaggaata aatgaacttt gtgatttttt
132421 ttcctgtcat taggtagggg gacaaaaatc ctcttaactc catgttcaga aatattctgg
132481 aaatttggtt tcttaagtca aattccacat cagaaacgat gggatgtggc ctggtagctt
132541 aagaacagca ggtacagaat aacttttttc tcctttgtct cagttttctt agctataaaa
132601 tggggggtaac agtcatctct tcctacctac cccaccaaac ttcgtgaaga acacactagc
132661 tacaggaaac ttggcaaaga gaaagagttt gacgctgtca tggcagaagc agtggctttc
132721 tcttattacg gtggctgcct ggcctttgaa ggcttatctt tccaggttta aactgagagc
132781 aagctgaagg gttatgactc gaagtgaggt aggattttgc caggcacact aggaggctgg
132841 gtatgcaagg tggttcattc agggagcctt ggctgacctt gacgcctgcg tccgtctctg
132901 atgctctgta ccaggtcagc tgtgtgtccc taacaaagaa tggcctccta actggggtct
132961 gcacatctgg gcatcttagt aaggggaaca gatttgaggt tcttctttct ttcagcgaaa
133021 ggtgagactt cgggttgaag aactggtaac tgtgatttgc aggcttgtcc atggctcctc
133081 agagctggca cttggggtgc tccttgtcca ccccttccct ccctaggccc acatggggca
133141 ccctgagctt gcctgagccc tactgtgatc tcacggaggg caggctatga actagaaagt
133201 gatgccacac cctggcaact agagaagtgc ccatccaggg gcatgtccca taggtatctg
133261 cctgtatgga ccctagttac ccactgacaa aaagaggggc acaaccctcc cctgtagaac
133321 tgtagcgcag agtgaggaca tgacgacagt gaggcctggg gccacccgct ccaccctcag
133381 gggcttgtaa gaatcccaag gaaagtcatg cctcctgcag gtgtgtcgag gcacagggca
133441 gagccctccc acttcccgcc cctgcacagc agtgtcattc ctcctatgac tacagtgctt
133501 tgaggacagg aagaactttc ggttcttggg aagcccgggg cagaaggggc ctgagctgct
133561 caccgcgtcc atccctcagg acaacctcga catcgccggt gatccagcgg tagcagggga
133621 actcgatgta gtccccgtgg ggcgtcttca gcgtgatgta cttcaggtac cagtcgtcat
133681 tcagccagta cttgcgcttc tcgattctga ccagctggat ctcgcccagt tcctcgtcca
133741 cagtcacgtc gtatgaatcc acctgggaag gagaacaggc aatcaggcca tgcgtggtct
133801 cctgagcctt tgttctggag gtgttaagaa tttgtcaccc caaggtatgc tgctgtggca
133861 cagggactac gttgaatgaa aagcacttaa aaaaacagca ggtgcaagat actctgacat
133921 tcgtgctgtt cttagaagc aggagatgaa agtcccctat gaaagatgtc ctcactatac
133981 caaaaggaaa gtaacactct tttcatcaag gttgggaagt tgaagccaaa ggaaatccat
134041 acaaacagat cttgtacaat gaacgcttac ctcccgagtc acttccctgc ccagttacct
134101 gccctagccc aagcccettg gccttatcac atctcacgat gattcattca atgcagtatc
134161 taagggggat tgactctaac tgcttcttgg ggtcttcatc tttttaagag ggctcccatg
134221 ccacgtacaa cttgtattaa agaaatctgt aggctttcgc ccatgaatct gtcttatgcc
134281 gattctcaga cctagctgaa atgggaagag gtggagtttt gcctccacta cagttcatgg
134341 agccaagatt cttcatgaac accttaaatg aactcctgaa ttcatttacc caagacattc
134401 actgaaggcc tgcccctgac aaggctcagt gctacgaccc aggcaggtga aagaaatgga
134461 caaatcctgg gccctgccct tgaggagaga gaatccagtg agccaggatg gtgctgtgct
134521 gctcagaggg caacgcctgc tgactgcact tagctcaggc tggaggatgg ggagatgccc
134581 aggctcatgc ctgcacctgc gaggctgtgc ccagtgaggg tccgcagctg cccccacatg
134641 ggatagcctt gtgggagacc tttacaactg gagatgggct tgctgacagt ggatccccac
134701 aatgactctg ggagtgcagg ggagttacca ccccttccac agatgaagac agcgaggctc
134761 agtgactccc acctctgcca cttccagca gagctggagt cacacccag gtctttccat
134821 catagccact tcctctcttt ccagttttca gtggggataa taagtgagtg aaaatggtga
134881 ggcttagata cagggagctt gcatggattc gagtcgtcct gggacatttg cagttcacag
134941 ctgcatggtg atgcccagag aacagtgaga ccaagcagct ctgctgcacc tgtggcatta
135001 ctggtggcag ggtgaggcta gccttgcagc tagaaggcac caccccaggc tgtgtacagc
135061 gcagctgccc aggcctctgg acaaggctg cttggccccc tccctgccag gctcctgctt
135121 ccaggacaca ggcggctctg aggcaacagc catagcttct ggagggcttt tgtctctgca
135181 gcaatggatg gcagacagga agttgggatg agaggctcag gcattgcatc acgcattctg
135241 atgaccagca ggtttggaaa gccccggact cgatgccctc caaggcatgt tcttttttat
```

FIGURE 4 (cont.'d)

```
135301 tttgaggtgg agtctcactg tgttgctcag gctggagtgc agtggctcga tctcggctca
135361 ctgcaacctc cacttccagg gttcaagtga ttctcctgcc tcagtctccc aagtagctgg
135421 gactacaggc acctgccacc acatctggtt aagttttgta ttttcagtag agacagggtt
135481 tcaccatgtt ggccaggctg gtctcaaact cctgacctca agtgatccac ctgcctcggt
135541 ctcccaaagt gctgggatta caggcatgag ccactgtgcc tggcccctgc aaggcacttt
135601 ctaagccaga ttcatcaacc cttgaacttt atccctggcg gcagaaccta gagttctcag
135661 catgatggca aagtggaagg ggcgaggggt atcatccttt gtgcgagcgc aggcatcccc
135721 attccatgcc ctgcctccaa gctgccagga ggacccctgg agggcttcct aagaggaatg
135781 ggaacttgag tgttttccac aaacctcctg gctctgaata ccgtgagcag tttggggtgg
135841 ctgacgctga ggccagacgc ttgtggtcag aaagcggaag cttcctccct gtgctctgta
135901 gtctaggcca gaggccctag gaacagtttc tgatgacaga ggagccaggc ccatgtggtg
135961 ggatgacatg tcttgggtcc agccacatgt ggaccagcct cggccccacg acaatgcccc
136021 tcctgcaggg agagtatcag cctcatctgc cacctctgag aaagccttcc tgccacagct
136081 tgtcctcagg agagcagggc cacacacaag gcctcgccca tcatggacag ggtgggcagg
136141 ttctgatggg acaggagtct cagcatctca ggggctcggg cccatctgga ggagcagagt
136201 ggggctgag tggcccagga ctggatacgc gtcgggcctg ccccacgcca ggccctgcat
136261 gccacaggga tttacagagg ccttagctgc aggttgtgag ccaagacaga gattcctgat
136321 cccaccgagg agtggggaga gggcagtgag gggtagaagg ctcggtgggc cctggggtct
136381 ggagctctga attcacatcc cagcttcagg caagtagctg gatggcctgg gcacattgct
136441 tcattctctg aagctgtttc ttcatctacc caaaggagat acccctcact tgcaggacca
136501 ttgagaaaat gaaatgacac catcctgggt ggcctccttt ctccagaggc acaggccacc
136561 ggttgtgtgc atcagaacca ccagtgcccc ttcctgaatc caggggggttg cagggcacca
136621 ggccccacac cgcctgtgag ctagcatggg cccctgcgtc acggccactt cgtgactaca
136681 tgtgccaatc cgagtaactg gagcacacat gggaggagga aactgaacct gtgacctcaa
136741 actccttcac tcaaagccca gaaggaactc ctgaaaggct ggagacaggg ctgtgaggac
136801 agagggagag tgggaggcat tctgaatgct ggtggggcag gcagagcaag tctgtgtgcg
136861 gtgaggactg aggggcggcc accagaggcc cgggcctggt ctgagtgtgg ctgctgcagg
136921 ggaagtagct ttcctatggc tctgaggggc tggagaggga ggaaggtgtc cccaggggat
136981 agatgacagg aaagctgggg tggggtggga ggagctaaca gggacactct catgggaggg
137041 aggctcccag taccttggac taagagggga gggagatggg ctgaggaggc attccaggac
137101 tgggcaggtc ccacagggag ggcccgatgt ctacctgggg gtgacgaccc acacgaagag
137161 actgagcagc ttctctgagg gagtggacag tggggtgacc ctccagcaca cctgtggtgc
137221 agtcacaggg gactgggaca ctcctggccc cctgccctac ctacacctgc aggcacctgg
137281 tggagagccc ctgagtttca cttggggtga aatcactagg cagatttaca aggactccat
137341 ctgccatctg acaggggactt ccacagcagg aggggggccag gcctgcagtc tggctggtct
137401 atggccagcc cagccacttt cctggtgctg gcttcaagcc tgaatatgat aagaggtgaa
137461 caaggggcag agggctccag ccttgaccca actcagggag taaaagacaa agcttgatgg
137521 ctgtggttct aacatcccag gggccactaa tggaagaatg acagataaag gcctccttcc
137581 aggaaaatac cagggtcaca tgtgtcaaac tgcaaaatat cttcggaagg tttgtggaac
137641 tacaatggcc accttcctcc ctcctctctg ggccaagtac actgggctga tgctatattt
137701 gtctatttgc tgtgacacat taaattctca ggtgacacac tgaattatgg tgggcactat
137761 caacagtgga caccccccaa caggccctca ggaagcactg ggcctgggaa tggccgagcg
137821 agtgattatc ctgctttaca gatagaaact gaggctcaga gagcaatggt ggcctcaaga
137881 tcagaaccta cacctgtgtg atggccaagc ccaggttcct cccacagttc cccaaggcca
137941 catcttgaga aaagccctga accggaagct agaaggccca gctttgagcc ctggtttgta
138001 ccctggatgg agtgtaaagg ggcaatgtgg agtggcatgg aaggacaggg aaaagcttca
138061 taagagggta tttcaggcag cttttagggg ctgatcagat ttcagagggc agatgagtag
138121 gaggatgggc atgggtagca catttcagat gtggggaact gggagggcag ggtccccggg
138181 ggattcacac gtgggaggag gaaggctgga cacagtttct ggggacagaa gtgggtggcg
138241 tggtggtgca gatgctggag agaaacaagg gaaacctgca actcaccggc ctcatttcac
138301 aaggggccac tttgctgatt ttgcttgttg cttttaactt tttattggat atgtagtttt
138361 aaagcttttg aatatttcgg caaagagtca gttggtcagt tttcatgtga gctttctatc
138421 agcattttag gaaagttttc atctgtcttt catcagatct ctgctgttgc tgggacaggg
138481 agacggatct ctctgcggaa gcaaggatgt gtgccccacc cccagactac ccatcttgga
138541 ggggggactaa tgaggggctg tgggaggagg aagctgtaga gcagagagga agattggggg
```

FIGURE 4 (cont.'d)

```
138601  ccagacaaaa  cagagactcg  ggatgagaga  gggggaggct  atggggaaga  gctgaggaaa
138661  acaagggacg  gagagaggga  ttggggtagt  ggatagggag  accaaggggc  agagaagggg
138721  gaaaatgtgg  gacagagagc  cggagattga  gggagcagag  aaggggcctc  tgagaggtgg
138781  ctggaagaca  gagtgtagag  gaaaattcag  agcaaaaaag  aagggagagt  tgtagggtag
138841  agagcagaaa  cggggggcat  ttagggaact  gggagcaggg  gaaggaagag  gaggcagaag
138901  aggggggcaga  atgtagggaa  aagatggctc  agaggggggag  actgggagat  gagagacgga
138961  ttgagggtca  taccaaagaa  atatttatgc  tccactaata  tattcccatt  cacaagaagg
139021  aggtattcta  gaattaattt  ttcatgaatg  taagaatact  cactgactta  agaagcatga
139081  atcattataa  cacttttcta  cacttgttga  acatattcaa  gtatcatata  ttaaacacca
139141  cgctattgcc  cttagctttc  ttaaaagtac  cagcacagaa  tgaaatgggc  caactaagat
139201  ttctcagaaa  tcttcagatc  tgttacagtt  atcgtatccg  atctgaatta  ctttaaattt
139261  acagagttaa  agaaataaat  caacttgtta  aatttgccta  gacttgggtt  agcctctgga
139321  aacagggcca  ttctgtgtag  gatcccggct  ttctccagca  gacagtgagg  agccaaggaa
139381  gacacaaccg  tttataggat  aatcccacct  gcgaaggact  tgattcccag  tcctgactga
139441  atcactatgc  ggaactctga  tgagaataac  aagggacctg  tgactcactt  tatcaaggaa
139501  aaaatcagtc  ctgtccatta  tttgactgaa  ctatgccctg  gaggaggggg  gtgttgacct
139561  gccaataact  tggaaatgat  taaattgtgt  ggaaatacct  ttattgttat  tgttatcgtt
139621  actactgtta  acaatacaga  ttttaacact  tttccctgta  aaatgggata  accttgtctt
139681  ctcagcaagt  acttcctcta  gggtttctct  tttacccttta  cccaaaaagg  atgattgtct
139741  ttacagatac  caagctggga  gaatgaggaa  gtagttctgg  gctgggcaag  agaaagtgtt
139801  gagtaacttt  gcatcaacag  gaactttctc  aaaagctgat  tttttcaagg  aaactttcag
139861  ccttagctgg  ttccccaccc  tgcggtagcc  cccacccca  accaccccc  gccccacccc
139921  tgacttatag  ccctctcaac  ccaatggaaa  tgtgacatgc  aaatctctcc  tgaaatttgc
139981  ccctgggatt  ccggctgagg  tgtttaatta  taatgtcatt  tgaatgactt  ctcagggtag
140041  gggaagacag  accgagagag  ggagatagtg  gacaaaacag  tgccttcact  ctttgtccga
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140161  cgtgctgtgc  agtgtgagca  caccaatggc  ctgtgcttct  agaaccttat  gatgtgtgga
140221  ggagaatggg  gaggaggaag  cacttacaaa  ggggaagtag  cctgtaccct  gtccttctcc
140281  cccaggtgtg  gggaatccat  gaaataatgg  aagtaaatga  aggtgcgtca  gaaatggcag
140341  agggtgccat  caccctaaat  ggacgacaca  ttaactccag  ggcaccgcag  tcctcagggt
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140521  acagcgaggg  tatgggctcc  tggataggaa  tcgagcccat  ggagagcttg  gaatccagaa
140581  aaagagtagt  ttttacttac  tttaggctct  gcacacctaa  aacacaaatt  ttatccaaga
140641  gtaatcagtt  gaaacatgaa  cttgccggtt  gtatttgtcc  attatgagca  atttcacaag
140701  gtttgatcaa  ataataaact  aaatggtgag  aaggcagctt  ggtaaagtct  aaatcttttt
140761  ggtccagtta  ggagctgggg  tggggtggaa  gggaactgat  attccctgcg  cacctgcagt
140821  atgtctggga  ctattaccag  tcatttacgg  agcgcttcct  ctgtgccagg  tactggatta
140881  ggcacttcat  taaaggctca  gtgagaactg  cgacctgccc  atgctcatgg  aaaagagtcg
140941  tggggctgga  attcaggtcc  agatcagcat  taggaactag  cttccaaatg  ctgagggctc
141001  cctcgcgtcc  tcacacctag  cgtggaagtg  ttccctggtg  tacattctgc  tgggagggag
141061  tgcagcccct  ccatttagga  aaagcctctc  ctggcctggg  ttctgttcct  tccctttaat
141121  ttcctctggg  gactgtcctg  agaatgtaag  ctgcccaggt  gccgtctgag  ccaccagatg
141181  ggcctgggct  cacccatgac  tcatggacca  gactgaagcc  aaccctccat  tttcagctgg
141241  ggaaactgag  gcccagacag  acggtagagt  gagctggtgg  tcatgtctgg  acagaactca
141301  ggcctctgga  cccgctgacg  tgcacccttc  cccacggctc  acagctggct  gctccgaggt
141361  gccctcagag  ttctgtgagc  atgactcatc  tgcctctccc  tccctgtgcg  acctgcagaa
141421  ggagcctaag  gaagaggtgg  cacaagaaac  gcggcccagt  gaagggggct  ccggagcctc
141481  ggagcccaga  tcttgaagtg  gaggggaaac  cttgggcctt  ctcctcccag  ggaagacgcc
141541  ttgcaggcgg  cacgcgggaa  gtctccgttt  ccgacagggg  tcgcggccgc  cgcgaggggt
141601  cctggacgct  tgcccaccag  ggtacccacc  ggccactggg  agcccagggc  acgccccacc
141661  gcagttctgc  cctccctgac  agggtcctgg  acaccccccag  tcctgtccgg  gccgcccga
141721  cgggccctcg  gcgccccgc  ccaggcctct  gccgtccaaa  ccgggtcccg  gacgcacctc
141781  agcccgcgct  ccacccgtgc  cccgccgcgc  ctcaccgcgc  cacgctcgaa  gtcgttgtag
141841  aagggcttgt  ccagcaggtg  cttctcgctg  cagcccgccg  agcccacgag  gctgaggtag
```

FIGURE 4 (cont.'d)

```
141901 atgtagtcgt cagtgtcttc accacggggt gaagtacggt ccnnnnnnnn nnnnnnnnnn
141961 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
142021 nnnnnnnnnn nnnnnnnnnn nntttttggg ttgttgttgt ctctttgttt ttgcgagcgg
142081 tccttccgcc ccgtggtgaa gacaagtggg cgcctctgcc tggccatccc atctgggagg
142141 tgaggagtgc ctctgcccgg ccaccccgtc tgggaagtga ggagcgtgtc tacccagcca
142201 ccacgtctgg gaggtgagga gcgcttctgc ctggccgccc catctgggaa gtgaggagcg
142261 cctctatctg gccacccctt ctgggaagtg aggagtgcct ctgcccggcc gccacccgc
142321 ctcggaggcg aggagcacct ctgcccggcc accacccat ctgagaggca aggaccacct
142381 ctgcctggcc gccatcctgt ctgggaggcg aggagcacct ctgcccagcc gccgccccac
142441 ctaggaggtg aggagcgcct ctggccagcc gccccacctg ggaggcgagg agcgcctctg
142501 cctggccgcc ccatctggga ggtgaggagc gcctctgccc agccaccacc ccatctggga
142561 agtgaggagc gtctctgcca ggccgccccg tctgggaagt gtacccaaca gctccgaaga
142621 gacagcgacc attgagaacg ggccatgatg acgatggcgg ttttgtcaaa aagaaaaggg
142681 ggaaatgtgg ggaaaagaaa gagagatcag attgttactg tgtctgtgta gaaagaaggt
142741 gacataggag acaccatttt gttctgtact aagaaaaatt cttctgcctt gggatgctgt
142801 taatgtacaa ccttacccc aacccgtgc tcgctgaaac atgtgctgtg tcaactcagg
142861 gttaaatgga ttaagggtgg tgcaagatgt gctttgttaa acagatgctt gaaggcagca
142921 cgctcattaa gagtcatcac cactccctaa tctcaagtac ccagggacac aaacactgct
142981 gaaggctgca gggacctctg cctaggaaaa ccagagacct ttgttcacct gtttatctgc
143041 tgaccttctc tccactatta tactatgact ctgccacatc cccctctctg agaaacaccc
143101 aagaatgatc aataaatact aaaaaaacaa attaattaat taaataaatt tcatatggaa
143161 ccaaaaaaga gcctgcattg ccaagtcaat cttaagccaa aggaacaaag ctggaggcat
143221 cacactacct gacttcaaac tatactacaa ggctacagta accaaaacag cacggtactg
143281 gtaccaaaac agaggtatag accaatggaa cagaacagag ccttcagtaa taatgccaca
143341 tatgtacaac tatctgatct ttgacaaacc tgacaaaaac aagaaatggg gaaaggattc
143401 cctatttcat aaatggtgtt gggaaaactg gctagccaat aaatggtgta gggaaaactg
143461 gctagccata tgtagaaagc tgaaactgga tcccttcctt acatcttata caaaaattaa
143521 ttcaagatgg attaaagact tacatgttag acctaaaacc ataaaaaccc tagaagaaaa
143581 cctaggcaat accattcagg acataggcat gggcaaggac ttcatgccta aaacaccaaa
143641 agcaatggca atgaaagcca aaattgacaa atgggatcta attaaactaa agagcttctg
143701 cacagcaaaa gaaactacca tcagagtgaa caggcaaccc acagaatggg agaaaatttt
143761 tgcaatctac tcatctgaca aagggctaat atccagactc tacaatgaac tcaaacaaat
143821 ttacaagaaa aaaacaaaca accccatcaa aatgtgggcc aaggaaaaga acagacactt
143881 ctcaaaagaa ggcatttatg cagccaaaag acacatgaaa aaatgctcat catcactggc
143941 catcagagaa atgcaaatca aaaccacaat gagataccat ctcacaccag ttagaatggt
144001 gatcgttaaa aagtcaggaa acaacaggtg ctggagagga tatggagaaa taggaatact
144061 tttacactgt tggtgggact gtaaactagt tcaaccattg tggaagtcag tgtggcgatt
144121 cctcagggat ctagaactag aaataccatt tgacccagca atcccattac tgggtatata
144181 cccaaagtat tataaatcat gctgctataa agacacatgc acacatatgt ttattgtggc
144241 actattcaca agagcaaaga cttggaacca acccaaatgt ccaacaatga tagactggat
144301 taagaaaatg tggcacttat acaccatgga ataccaagca gccataaaaa atgatgagtt
144361 catgtccttt gtagggacat ggatgaagct agaaaccatc attctcagca aactattgca
144421 aggacaaaaa accaaacact gcatgttctc actcataggt gggaattgaa caatgagaac
144481 acatggacac aggaagggga acatcacaca ctggagcctg ctgtggggtg gggggttggg
144541 ggagggatag cattaggaga tatacctaat gctaaatgac gagttaatgg gtgcagcaca
144601 ccaacatggc acatgtatac atatgtaact aacctgcatg ttgtgcacat gtaccctaaa
144661 acctaaagta taataataaa aaaataagct tataaaatgc ttttaatgct atataacttt
144721 ataactctga aagaataata gatttgtatt atgctgtcag tgagtaggtc tattaagtga
144781 taacattaaa cacaaatacc accatttata aagtatgatt ttgatatcat cggttgtgta
144841 ttttcacccc aaactctgta gatagtaact ttgtttttctc atttgaccat gctcaatctt
144901 tagagaccat gctcttctct caaaatgact gtaggttcat ccaagtatgt ttgctaccca
144961 aaatcaatga aacacagtca caactatgtc tgtctaggaa taaagccagc taattagatt
145021 cttattctaa ggaacaagaa gagggcaggt aagaatttga ttatggcaga attctgacca
145081 taatcaataa ctgtttccta ttttttctcc atgttgtcgg gtggttcata cctgactttc
145141 atcatttcca atgattcctg tttgttttgt ttataaattt caaaatcatc atgaaaagtt
```

FIGURE 4 (cont.'d)

```
145201 tcactgaatg aaaacctgaa aattgggaaa taaacatttt tctgcaaaaa aaaaaaaaca
145261 atgaacactg acttctccta tttctcaaag tcatctcaaa gccatatgag gattaccaca
145321 aacttgcagg tgagaaaatt ctttgcaatg taagaagtgc catgcaaatt agttgatgct
145381 attataatta gtctcaggga tcaaaaatgc ttgaacccta aatctaacac ttcaaaggaa
145441 agcattattt ttcattcatt ttacaagtta cacctccctt cttccccaca tctttgttta
145501 gaatctggac cctgaagtta gaggaccaag attcaaatcc cagcctcatc agtactagct
145561 atgtgatatt gggaatgtta cttgatccct gcttatctta ctttctgcat ttattaaatg
145621 gggatgagaa taatatctac ccaaataagg tgcccaatgc agtgcccaac agcatgaagc
145681 ccaataaagg ttagttaaca tcacatccat aattgacacc tttaggtatt agattttcat
145741 catcccagaa cattttcctt ctttaagcct ttttctttct aagtggcact ttcttggata
145801 ctgattgcac tcctcacaaa cttgaaacgt tcaaacacac aagatgccat ttaggagaca
145861 ttggaacttg ggtttccttc tctgtaaaac tgagtaatga cagtcacctc ccagggctgt
145921 tgtaagaatg aatgagctag agtatgtaaa atatcttagc acagagtgct taagaaatta
145981 ttagttccag ccaagcgtgg tggctcacgc ctgtaatccc agcacttagg gaggccaagg
146041 caggcggctc atctggggtc aggagttcaa gaccacctgg tcaacatggt gaaacccgt
146101 ctctactaaa aatacaaaaa ttagccaggc gtggtggcat gtgcatgtaa tcccagctac
146161 tcaggaggct gagacaggag aatcacttga acccaggagg tggaggttgc agtgagccga
146221 gatcgtgcca ttgcactcca gcctgggcaa caagagtgaa actctgtctc aaaaaaaaaa
146281 aaaaaaaaaa gaagaagaag aagaaagaag gaaagaaaga gagagagaga aagaaagaaa
146341 gaaagaaaga aagaaagaaa gaaagaaaga aaagaaaga aagaaaagaa agaaagaagg
146401 aaagagacag aaagaaagaa gggaagaaag aaagaaagaa agaaagaaag aaagaaagaa
146461 agaaagaaag aaagaaagaa gggaagaaag aaagaaagaa agaaaaaaag aaagaaagaa
146521 agaaaagaa agaaagagag aaagagaaag aaagaaagaa agaaaggaga gacagaacga
146581 aggaaagaag gaaggaatta tttccctttt tcccacccac gcctcaccac aaaccttgtt
146641 gtggggataa catgtaaaag tgaacaaaac tgagaagatc acatcgcata tgcactcagc
146701 ctctagtggg agacacaggc aataaacagg aaaagttaaa aacagtacta ggtagtggtg
146761 agtgcaatta gcctcccgca gcataaaggg aggagaataa ccagtggctc tttcatgcag
146821 agaatcaggg tagacctctg gggagagacc cgcactcaga ctgggatgga attatttatt
146881 ttatgcgtgt tcagttagga gtagaggtgc tctgtcgtga ttatctaatc ttgggaggaa
146941 caatgtcaga cgggtttcaa gatgagtatg agaattggtc ttccttctga aaaaacaaga
147001 attgagttca cactaatcac aaatacatca agcctatttg agtcttgtgt gtgtcatgga
147061 ttgaagtgta tctttccact tagtcaagaa gttccaatga gaagaatgct ccttaacttc
147121 ctaagtgcaa cagagtagtt gaactgagcc atggatggta aatctactta agaaagcaca
147181 tgccatggaa agatagcatt ggctgccctg cctacttctg atggcacagc cttgcaggaa
147241 gggaaagaag ccaagaggca aaagcctggt cttgttctga aaggcacaag gaggtggaag
147301 attaggggaa actcacccaa aaatgactca gctctgaact cagactcaag aagccacaat
147361 aagcaacatg aatggaactg gagggaaata aaccaggcgt agaaacacaa atgttgcata
147421 ttcttactca tgtgggaact aaaaacatgc atttcaagga gaatagaatg atggttatca
147481 gagactggga acagttgtgg gtgggggtgt taagagaggt tgcttaatgg gtacaaacat
147541 atagttagat agaaggtata agttctaatg tttgacagca gagtaggaga actatagtta
147601 acagtaatat attgtatact ccaaaatagc tagacaggaa gatttgaaat gttcccaaca
147661 catagaaatg acaaaagctt gaggtaatgg ataccctaaa tatcctgact tgatcattac
147721 acagtctatg cgtgtaacga aataccatat gtaccccata aatatgtaca aatattatgt
147781 atcaataaaa attttaaaa agaagctgca atcaacattt catcattatc ttttcagcag
147841 catccttaca aagttacaga gacatcttaa gatgtatccc tcttcctctg aatcttcctg
147901 ggatagaaca aatgaaaact aaacaaggag tgggctggga ggagctgtca acatccatcc
147961 taaggaaaag tctgttaggg ctatgagctt cctctgtcct agagtagagc tgggaaaata
148021 gagtcttgac aattgatttc ttattctttc tttctctaaa tccccaatga atatgttttt
148081 cttttagtg ctcagtggta gacagggctt aattctgttt agttatgcaa acaggccaga
148141 agaaactgaa ataggctata aatgtttgaa gctggccaaa agaagatgta gtcacacaag
148201 ataccctctg gaggaaagtg actgtcagga aagtcacttt cctgaccagc aaaaggacca
148261 gcactatttt gtcctgctga agaagtacat ttgtcctgct gctgtcatgg ggacagtggc
148321 tccagggctt cctgtggaca tgccacaagt tccactccat gagtcaggag atcatgcggt
148381 cagctggggg gaacttaggg ttgctctctt gagcttagcc ttatgctgcg tgtctgcttt
148441 gccaaccaca aaaacgatag tttcatagca agttgcaggc tccctggaaa cttaacctac
```

FIGURE 4 (cont.'d)

```
148501 ctactaggat acatttacag ctgcttttct cctggcatca ggctggagat caagaaatac
148561 ataaaacata gtccctgccc tcagttagct cagaatatgg tgggggaatg gagacagaag
148621 caaatactgg tgggacaagt gacgatgggc caaaatatgg gcttaaacaa aggttgtggg
148681 agctcagaaa aggagcaact cactctgcct gaaagagtca tggagggctc cacggaaaaa
148741 gcaacatttg tgcaggagga gattagaaca cagaggagaa ggatagcagc actccagatg
148801 aagggaagga aatgtgccaa gatttcatgg gaatgagaag atgtaaactg ctcaggaaaa
148861 accatggttg aagctcttca cagtggctga agcatggtgt gattgtcagt tttgcttgtc
148921 aacttggtca ggctgtagta ctcaactatt caaccaagca ctgatctagg tattgctgtg
148981 aaggtatttt gtagtcgcaa ttaacctcta caatcagttg actctattta aaggacatta
149041 ttctgtacta tctgagtgga cctgatccac ttcatcccaa aggtaaatga ttctccaaca
149101 gtgttctcat ctacatctag ggcttggaag atgaaggtga aggagaatat ggaaaaacaa
149161 caagaaaaaa gtcaatcaat cagaacttcc agccctgtgt ttgttagttc actttatgtt
149221 caaccagtat gtctccactt ttatctgctt ccttgtaaga tttcatctga aaaagggaat
149281 tcactcttca ggtgttggaa atcaattatg agagaagcac ttacagaatg actatctgaa
149341 gagctctgca gacattctcc agagtaaaac aaccataacc ggtgaaaatt aaaaacaaac
149401 aaaataaaaa aatgttagag tattggaaat tgttctaagg gccgacagca aatgaagaaa
149461 tccaagaaag cctaccaatt tcagtgagag gagtgagagt ctatggtgtt gagtctatgg
149521 tgtttaagtt ctgttcattt cctccctctc ctgcaatcag ttcagtgaaa cagaaaccct
149581 gctccagaga tgtgcagcca aaaagacagg gtgccctttc ccctcagctc ccaatctagg
149641 gcagactacc agcatttccc aagcccatct ctggctctat gttgcagaag ttctattcca
149701 agaaagtttg actgagaatc tgaagcttcc ttcttccact cagcctctac tattaaggcg
149761 taagttctat ccccagtgcc acgggccaag aatactgatg ctgaatgtcc ttgctccgct
149821 acactcatag ggcagagatt ccatgggagg agtgaagttt ccattccaga aaaggcagaa
149881 aaacagaaat tactgcccaa tccagtaccc cacccataaa gaaggaaaga catctgagaa
149941 aagcatgaca ctgtccccaa aaccacctgc agagtagtgg cagtagaggc agtagggaga
150001 ctagaggacc tgcctagagg gagaagtagg ccataagaag aaaagtctct agttctccct
150061 aaagggacaa actttatttg caacagaaca tgcggaagtt caagcctaag ggcactgtca
150121 aaaacaatga atattttggt ggtaagcaat taataggtta atggcagctt agtgagagca
150181 acaaactaaa ccataaacca gctagacata tacaataaaa atccaagaaa gagagagcca
150241 agaagggcct tcctgaggtt aaaacaaaca tcaaagtctt gtctgaaaaa ctgctcctgc
150301 aaaggaagca aaatatattt ggatcagact gtggagcaat ttatgcccct aaaaagctgt
150361 caaaaccaaa agagcaatta tctagcaatt gctggaggtt aacagttggg tatgatacca
150421 aaagaggcaa acaactgaac agatcagaga aagaggcagt caaagagagc actgctaaat
150481 gcactgtaat tccaatttga gagaaaatgt gcccagtgct gtgactccct caggaacaac
150541 atcagaggcc acaaattatg gtggaaatag gcttcactat atagtctagc caggcaatta
150601 aacaaataaa caattaaaca acagtaacat agtgaggggg gcagaaatga gtattgcaac
150661 tagctagaac atattttga acaaaaaaat tatgagtcaa gcagagatat ggaaaagaca
150721 gagccataca ccagaaaaaa ggtaagcaag agaaactgcc tttgtgagtg ccaagatgtc
150781 agacatagca gaaaaaaaac ctcaaagtaa ttattataaa tatgttcaaa aactaaaaga
150841 aaatgtgctt aaaaaataaa agatggtatg ataatttctt gtcaattcaa aaataccaat
150901 aatagattaa aaatattttt tcaaaagtta attaaccaaa tggaaattct ggggtttaaa
150961 agtaaaataa caacaataag aacattttgc tagaggaaat gaacaataga tttgtaccag
151021 aaggaaaaat aatcaaataa acagggattt catcaacacc aaacctgtct tacaagaaat
151081 actaaaggga gttcaatctg aaagaaagaa cattaacaag caacaggaaa tcatctgaag
151141 gtacaaaact cactgtacct tcagatgata ataagtcctc aaaaaacaca gaatattata
151201 acactgtaat tatggtgtgt aagctactta tatcataagt agaagagga aaagatgaac
151261 tgattaaaaa acaattacaa cagcttttca agacagtata ataagatata taaataacag
151321 aaagcttaaa agcatataaa taaagttaaa atgtagaggt ttttttagtt ttctttttgc
151381 ttgattgtgt atttatttat gcaatcagtg ttgtttttcat cagcataaaa taatgggtta
151441 taagatagta tttgcaagcc tcatagtaac ctcaaattta aaaacataca atgtatacac
151501 aaaaagtgaa gagcaagaaa ttaaaacata ccaccaaaaa aaatactttc actaaaaagg
151561 agacaggaag taagaaaaga tgggagagaa gatcacaaaa caaccagaaa ataaataaca
151621 aaatggcaag caagtcctta tttgtcaata ataatattga atgtaaatgg actatactct
151681 ccagtaaaaa gatacagagt ggttgaatgg attaaaaaaa aggacccaat gatctgttac
151741 ctacaagaaa taaacttcac ttataacaat acacagacta aaaataaagt catgggaaat
```

FIGURE 4 (cont.'d)

```
151801 gatacttcac gacaatggaa accaaaaaag aacaggagta gctatacctt tatcagacta
151861 aatagatttc aagacaaaaa ttgttaagaa aaaccaaata aggtcattat ataatgataa
151921 agagatcagt taagcaagag gatgtaacaa ttgtaaatat atatgcactc aacattggag
151981 cacctagata aataaaacaa atattattag agctaaagaa agatagaccc cctcccccaa
152041 aacaataata gctgtagatt tcaatgctcc actttcagca ttggacagat cttccagaca
152101 gaaaatcagc aaggaaacat cagatgtaat ctgaactata gaccaaatgg gcctaataag
152161 tatttacaga atatttcatc caaaggttac agaagacaca tttttctcct tagcacatac
152221 atcattctca agaacaggcc atatattagg tcatgaatca agtctcaaaa cattcaaaaa
152281 aactgaaata atctcaagca tcttctttga ccacaatgga ataaaactag aaaccaataa
152341 caaggggaat tttggaaact atacaaaaac atggaaatta aacaatatgt tcctaaatga
152401 taagtgggtc aatgaagaaa ttatgaattg aattgaaaat tttctaaaaa caaatgacaa
152461 tggaaacata atgcaccaga acctatggga tacaacaaaa gcagtaccaa gagtgatatt
152521 tccagataag ggcctacatc aaaaaggaag aaaaacttca agtgaataac ctgatgatgc
152581 atcttaaaga attaaaaagg caagagtaaa ccaaacccaa aattagtaga agaaaagaac
152641 taataaagat cacagtagaa ataaatdaaa ttggacttct gctccaagat ggcctaatag
152701 aaacagctcc agtctgcagc tcccagcatg attggcacag aagatgggtg atttctgcat
152761 ttccaactga ggtaccaggt tcatctcatt gggactggtt ggacaatgga tgcagcccat
152821 ggagggtgag gtgaagcagg gtgaggagtc acctcacccc ggaagcacaa gtgattgggg
152881 gatttccctt tcctagccaa gggaagccgt gacagactgt acctggaaaa tcggttcact
152941 cccacccaaa tactgtgctt ttcccatagt cttagcaacc ggcagaccag gagattctct
153001 cccaagccta gctcatcagg tcccatgccc acggagcctg gctcactgct agcacagcaa
153061 tctgagatca acctgcgagg ctgcagctgg gtgggggggg gggtgtcagc cattgctgag
153121 gactgagtag gtaaacaaag tggccaggaa gctcaaactg ggcagagccc accgcagctc
153181 agcaaggcct actgcctcta tagattccac ctctgtgggc agggcataac tgaacaaaag
153241 gcagcagaca acttctgcag atttaaacgt ccctgcctga cagctctgaa gagagcagtg
153301 gttgccccag catggcatct gagctctgag aacagacaga ctgcctcctc aagtgggtcc
153361 ctaaactcca tgtagcctaa ctgggagaca tctccccata ggggccgaca gacacctcat
153421 acaggtgggt gccactctgg gacaaagctc tcagaggaag gatcaggaag caatatttgc
153481 tcttctgcaa tatttgctgt tctgcagcct ctgctggtga tacccaggca aacagagtct
153541 ggaatggacc tccagcaaac tccagcagac ctgcagctga gggacctgac tgctagaagg
153601 aaaactaaca aacaaaaagg aatagcatca acatcaacaa aaaggacatt cacaccaaaa
153661 cctcatctgt agtcaccaat atcaaagacc aaaggtagat aaaaccacaa agatggggag
153721 aaaccagagc agaaaagctg aaaattctaa aaactgagca ccgcttctcc tccagaggat
153781 tgcaactcct caccggcaac ggaatgaagc tgggtggaga atgactttga caagttggca
153841 gaagtaggct tcagaaggtc ggtaataaca aactactcca aactaaagga gcatgttcta
153901 acccattgca aggaagctaa aaaaccttca aaaaaggtta gacaaatggc taactagaat
153961 aaacagtgta gagaggaact taaatgacct gatggagctg aaaaccgtgg catgaggaca
154021 tcatgatgca tgcacaagct taaatagctg attaaatcaa gtggaagaaa gaatatcagt
154081 gactgaagat caaattaaca aaataaagca agaagataag attagagaaa aaagagtaaa
154141 aagaaatgaa aagcacctcc aagaaatatg ggactatgtg aaaaaaccaa atctacactt
154201 gattggtgta cctgaaagtg atggggagaa ggaaccaag ttggaaaaca ctcttcagaa
154261 tactatccag gagaacttcc ccaaactagc aaggcaggcc aacattcaaa ttcaagaaat
154321 acagagaaca ccacaaagat attcctcaag aagagcaacc ccaagacaca taattgtcag
154381 cttcaccaag gttgaaatga aggaaaaaaa tgttaagggc agccagagag aaacgttggg
154441 ttaccaacaa agggaagccc atcagactaa aagtagctct ctcagcagac accctgtaag
154501 ccagaagaga gtaggggtca atattcaaca ttcttaaaga aaataatttt caacccagaa
154561 tttcatatcc agccaaacta agcttcataa gtgaaggaga aataaaatcc tttacagaca
154621 agcaaatgct gagagatttt gtcaccatca ggcctgcctt acaagagctc ctgaaggaaa
154681 cactgaacat ggaaaggaac aactgttacc agccactgca aaaacacgcc acattgtaaa
154741 gaccatcgat gacatgaaga aactgcaaca attaactggc aaaataagca gctcacagca
154801 taatgacagg atcaagttca cacataacaa tattaacctt aaatgtaaat gggctaaatg
154861 cctcaattaa agacacagac tggcaaattg catagagtca agacccatca gtgtgcggta
154921 ttcaggagac ccatctcaca tgcaaagaca cacataggga tggaggaaga tccaccaagc
154981 aaatggaaag ccaaaaaaaa aaaaaaaaaa aaaaaagca ggggttgcaa tcctagtctc
155041 tgataaaaca gagtttaaac caacaaagat ccaaagagac aaagaaagcc attacataat
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FIGURE 4 (cont.'d)

```
155101  ggtaaaggga  tcaatacaac  aagaagaaca  aactatccta  aatatatatg  caaccaatat
155161  gggagcaccc  agattcataa  agcaagtctg  tagagacgta  caaagagatg  tagacttcca
155221  cacaataata  atgggagact  ttaacactcc  actgtcaata  ttagacagat  caatgacaca
155281  gaagggtcac  aaagatatcc  aggacttgaa  ttcagctatt  caccaagtgg  acctaataga
155341  catctacaga  actctacacc  ccaaatcaac  agaatgtaca  tacttctcag  caccacatca
155401  tacttattct  aaaattgacc  acataattgg  aagtaaaaca  ctcctcagca  aatgtaaaag
155461  aacagaaatc  acaacaaact  gtgtctcaga  ctacagtgca  aacaaattag  aactctggat
155521  taataaactc  actcaaaatc  acacaactac  atggaaactg  aataacctgc  tcctgaatga
155581  ctactgggta  cataatgaaa  tgaaggcaga  aataaagatg  ttctttgcaa  ccaataagaa
155641  caaagacaca  acataccaga  ttctccggga  cacatttaaa  gcagtgtgta  cagggaaaat
155701  tatagcacta  aatgcccaca  agagaaagca  ggaaagaact  aaaatcaaca  acctaacatc
155761  gcaattaaaa  gaactagaga  agcaagagca  aacacattca  aaagctagca  gaaggcaaga
155821  aataactaag  atcagaacag  aactgaagga  gatagagaca  caaaaagcac  ttcaaaaaaa
155881  tcaatgaatc  caggagctgg  tttttaaaaa  gatcaacaaa  attaatagac  cgctagcaag
155941  aataataaag  aaaagagaga  agaatcaaat  tagactcaat  aaaaaaagat  aaaggggata
156001  tcaccactga  tcccatagaa  atacaaacta  ccatcagaga  atactataaa  cacctctaca
156061  taaataaact  agaaaatcta  gaagaagggg  gaggagccaa  gatggccaaa  taggaacagc
156121  tccagtctac  agctcccagc  gtgagtgaca  cagaagacgg  gtgatttctg  catttccatc
156181  tgaggtaccg  ggttcatctc  actagggagt  gccagacagt  gggcacaggt  cagtgggtgc
156241  gcgcactgtg  tgcgagccaa  tgcagggtga  ggcgttgcct  cactcgggat  gtgcaagggg
156301  tcagagagtt  ccctttccta  gtcaaagaaa  ggggtgacag  atggcacctg  gaaattcggg
156361  tcactcccac  ctgaatactg  cacttttcca  acgggcttaa  aaaacggcgc  acctggagag
156421  tatatcccgc  acctggcttg  gagggtccta  tgcccacgga  gtcttgctga  ttgctagcac
156481  agcagtctga  gatcaaactg  caaggcagcg  gcgaggctgg  gggaggggcg  cctgccattg
156541  cccaggcttg  cttaggtaaa  caaagcagct  gggaacctca  aactgggtgg  atcccaccac
156601  agctcaagga  ggcctgcctg  cctctgtagg  ctccacctct  ggggagcagg  cacaggcaaa
156661  caaaaagaca  gcagtaacca  ctgcagactt  aaatgtccct  gtctgacagc  tttgaagaga
156721  gcagtggttc  tcccagcacg  cagctggaga  tctgagaacg  ggcagactgc  ctcctcaagt
156781  gggtccctga  cccctgaccc  ccgagcagcc  taactgggag  gcatccccga  gcagaggcag
156841  actgacacct  cacacagccg  ggtactccaa  cagacctgca  gctgagggtc  ctgtctgtta
156901  gaaggaaaac  taacaaacag  aaggacatcc  acaccaaaaa  cccatctgta  catcaccatc
156961  atcaaagacc  aaaagtagat  aaaaccacaa  agatggggaa  aaaacagagc  agaaaaacta
157021  gaaactctaa  aaggcaaagc  gcctctcctc  ctccaaagga  atgcagttcc  tcaccaggaa
157081  tggaacaaag  ctggacggag  aatgactttg  acgagctgag  agaagaaggc  ttcagatgat
157141  caaattactc  cgaactacgg  gaggacattc  aaaccaaagg  caaagaagtt  gaaaacgttc
157201  aaaaaattta  gaagaatgta  taactagaat  aaccaataca  gagaagtgct  taaaggagct
157261  gatggagctg  aaaaccaagg  ctcgagaact  acgtgaagac  tcaggagccg  atgcgatcaa
157321  ctggaagaaa  gggtatcagc  gatggaagat  gaaatgaatg  aaatgaagtg  agaaggaaag
157381  tttagagaaa  aagaataaa   aagaaatgaa  caaagcctcc  aagaaatatg  ggactatgtg
157441  aaaagaccaa  atctacatct  gattggcgta  cctgaaagtg  acggggagaa  tggaaccaag
157501  ttggaaaaca  ctctgcagga  tattatccag  gagaacttcc  ccaatctagc  aaggcaggcc
157561  aacattcaga  ttcaggaaat  acagagaacg  ccacaaagat  actcctcgag  aagagcaaca
157621  ccaagacaca  taattgtcag  attcaccaaa  gttgaaatga  agggaacaat  gttaagggca
157681  gccagagaga  aaggtcgggt  taccctcaaa  gggaagccca  tcagactaac  agcggatctc
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157801  aagaattttc  aaaccagaat  ttcatataca  gccaaactaa  gcttcataag  tgaaggagaa
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157981  aatcatgcca  aaatgtaaag  accatcgagg  ctaggaagaa  actgcatcaa  ctaacgagca
158041  aaacaacctg  ctaacatcat  aatgacagga  tcaaattcac  acataacaat  attaacttta
158101  catgtaaatg  gactaaatgc  tgcaattaaa  agacacagac  tggcaaattg  cataaagatt
158161  caagacccat  cagtgtgctg  tattcaggaa  acccatctca  cgggcagaga  cacacatagg
158221  ctcaaaataa  agggatggag  gaagacctac  caagcaaatg  gaaaacaaaa  aaaaggcagg
158281  ggttgcaatc  ctagtctctg  ataaaacaga  ctttaaacca  acacagatca  aaagagacaa
158341  agaaggccat  tacttaatgg  taaagggatc  aattcaacaa  gaagagctaa  caatcctaaa
```

FIGURE 4 (cont.'d)

```
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161821  agcaaactat  gacaaggaca  gaaaaccaaa  caccgcatgt  tctcactcat  agatgggaac
161881  tgaacaatga  gaacacttgg  acacagggca  gggaacatca  cacaccaggg  cctgttgggg
161941  ggtggtggac  tgggggagag  atagcattag  gagaaatacc  taatgtaaat  gatgagttga
162001  tggatgcagc  aaaccaacag  ggcacatcta  tacctatgta  agaaacctgc  actttgtgca
162061  caggtaccct  agaacttgaa  gtataataaa  aatgaaaaaa  agaaaatgtt  actagcaaat
162121  tgtagatggg  tatacctaat  ataactctgc  atgtgcacta  tgtgtctgga  tacacatgga
162181  aagtattcag  gcatacacac  caaattgtta  aaataaatcc  ccttccaaca  ttaggagtgg
162241  ctggggagca  gatggctttc  acttccgcac  attccatggt  gccagggtaa  taccacatca
162301  caatagtaaa  tagcaaaaat  aacaacctta  agtttagatt  ttcttatcta  aattttaatt
162361  ctgtgaagaa  gtttccattt  ccctttttca  cacaggatag  tagaatgcag  tttagaaaga
162421  gtgagatcac  ttgttagact  gtacaatttt  taagcatcag  cgaagtatac  cattaaactt
162481  ctctatcaat  ccattctcta  aacttcccaa  cccaaaaaaa  aagaaacaca  taaaattgaa
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162601  caaaattgac  aaatgtttag  ccagactaag  aaaaagagaa  ggcccaaata  aataaaatca
162661  gagatgaaaa  agcagacatt  ataactgata  ctgcggaaat  tcaaaggatc  attaatggct
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162781  cacacgcaac  ctaacaagat  tcaaccatga  agaaattcaa  aatctgaaca  gaccaaaaac
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164641  tccatcaacg  gataaagaaa  atggggggag  gggtgtgcat  gtatacatac  acaatggact
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164881  gagctagggg  atgtggggaa  gaagcaaaat  attgggcaaa  gagtataaac  tttcagttat
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FIGURE 4 (cont.'d)

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165361  cacacacaaa  tggtaactat  aggtggtgat  agatatgtta  atttgactgt  gacaatcagc
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165481  tgtcaatcaa  atattttaaa  acgaaaataa  tcataatatt  aatatagcat  acaggaaaaa
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167341  gccgcgggaa  gccgcccagg  agcgcgcgaa  accttctcca  cacccttcca  ggcatttgcc
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168121  gaggaggctg  cgggctgagc  gaccctgacc  cccccagtc   cgcgctggtt  ccgg
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A DOCPHOENIX

APPL PARTS

IMIS _____
Internal Misc. Paper

LET. _____
Misc. Incoming Letter

_____ 371P _____
PCT Papers in a 371Application

_____ A... _____
Amendment Including Elections

_____ ABST _____
Abstract

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Application Data Sheet

_____ AF/D _____
Affidavit or Exhibit Received

_____ APPENDIX _____
Appendix

_____ ARTIFACT _____
Artifact

_____ BIB _____
Bib Data Sheet

_____ CLM _____
Claim

_____ COMPUTER _____
Computer Program Listing

_____ CRFL _____
All CRF Papers for Backfile

_____ DIST _____
Terminal Disclaimer Filed

_____ DRW _____
Drawings

_____ FOR _____
Foreign Reference

_____ FRPR _____
Foreign Priority Papers

_____ IDS _____
IDS Including 1449

Internal

_____ SRNT _____
Examiner Search Notes

_____ CLMPTO _____
PTO Prepared Complete Claim Set

_____ NPL _____
Non-Patent Literature

_____ OATH _____
Oath or Declaration

_____ PET. _____
Petition

_____ RETMAIL _____
Mail Returned by USPS

_____ SEQLIST _____
Sequence Listing

_____ SPEC _____
Specification

_____ SPEC NO _____
Specification Not in English

_____ TRNA _____
Transmittal New Application

OUTGOING

CTMS _____
Misc. Office Action

_____ 1449 _____
Signed 1449

_____ 892 _____
892

_____ ABN _____
Abandonment

_____ APDEC _____
Board of Appeals Decision

_____ APEA _____
Examiner Answer

_____ CTAV _____
Count Advisory Action

_____ CTEQ _____
Count Ex parte Quayle

_____ CTFR _____
Count Final Rejection

_____ ECBOX _____
Evidence Copy Box Identification

_____ WCLM _____
Claim Worksheet

_____ WFEE _____
Fee Worksheet

_____ CTNF _____
Count Non-Final

_____ CTRS _____
Count Restriction

_____ EXIN _____
Examiner Interview

_____ M903 _____
DO/EO Acceptance

_____ M905 _____
DO/EO Missing Requirement

_____ NFDR _____
Formal Drawing Required

_____ NOA _____
Notice of Allowance

_____ PETDEC _____
Petition Decision

INCOMING

_____ AP.B _____
Appeal Brief

_____ C.AD _____
Change of Address

_____ N/AP _____
Notice of Appeal

_____ PA.. _____
Change in Power of Attorney

_____ REM _____
Applicant Remarks in Amendment

_____ XT/ _____
Extension of Time filed separate

File Wrapper

_____ FWCLM _____
File Wrapper Claim

_____ IIFW _____
File Wrapper Issue Information

_____ SRFW _____
File Wrapper Search Info

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